DISADVANTAGED CHILDREN

Theory, Research and Educational Perspectives

K C PANDA

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The Author

Prof. (Dr.) Kailas C. Panda (b. 1935) received his BA Hons. degree from Utkal University, MA from Patna University, Ph.D in Educational Psychology from Graduate School, Indiana University (USA). He taught as Assistant Professor of Special Education (1970-71) at Virginia Commonwealth University, Consultant and Reviewer of early Childhood Education, USOE, 1971, Head of the Department of Psychology, SCS College, Puri. In 1976 he had joined as Professor of Education in RCE (NCERT), Mysore, Professor and Dean, in RCE, Bhubaneswar (1976-87) and later as Principal RCE, Bhubaneswar in 1989. He has also served as Dean Faculty of Education, Utkal University and retired in May 1995.

A known researcher in the fields of Educational Psychology, Education of SC/ST, Education of Handicapped, Educational Sociology, Educational Measurement and Teacher Education. Dr. Panda has published over 150 research articles in Foreign and Indian journals, guided nearly 40 Doctoral Students and presented papers at several International Conferences. He is a member of various professional associations, academic bodies of Universities, NCERT, UGC, National Institutes, RCI.

His contributions include books in Advanced Educational Psychology, General Psychology, Child Development, Elements of Instruction, Exceptional Children and Educational Research. He is the recipient of several Awards for his contribution to community and state by ABI, ICME and other organisations.

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PREFACE

The National Policy on Education laid special emphasis on the removal of disparities and equalisation of educational opportunities by attending to the specific needs of those who have been denied the privilege so far. The specially disadvantaged children, scheduled caste and scheduled tribe have virtually remained out of mainstream education. Physical and Infrastructural facilities are increasing rapidly but one of the stumbling block to take education within the reach of these children is the lack of understanding about the basic characteristics of these children : strength as well as weakness. Programmatic change therefore, falls far behind the expectations.

The present volume attempts to present an understanding of antecedents and consequences of social disadvantage putting disadvantage on an ecological framework. The book covers concept, measurement and characteristics of the 'Socially Disadvantaged Children' based predominantly on researches done in India and suggests remedial measures. The areas covered include cognitive processes, learning and intellectual abilities, personality and motivation, language, creative thinking, cognitive styles, and parental styles. There is a need to bridge the gap between advantaged and disadvantaged through intervention strategies at the preschool and school stage. Teaching the Socially Disadvantaged in terms of teacher and teacher behaviour, instructional strategy and curricular concerns have been exhaustively dealt in this volume.

A perspective and direction for future research is provided to make research meaningful and relevant which forms and integral part of any educational programme in the area.

The book is written with a focus on 'Positives of Disadvantaged' and aims to serve the need of university students in Psychology, Education, Social Work, Curriculum Development, and Research, as well as for candidates appearing in Civil Service Examinations.

K.C. PANDA

CONTENTS

Preface v
1. Social Disadvantage: A Theoretical Perspective 1
2. Measuring Deprivation 13
3. Social Disadvantage and Cognitive Process 23
4. Social Disadvantage and Language Ability 45
5. Social Disadvantage, Intellectual Abilities and School Learning 55
6. Social Disadvantage and Motivation 83
7. Social Disadvantage and Personality Characteristics 97
8. Social Disadvantage, Cognitive Style and Creative Thinking 111
9. Scheduled Caste Children : Characteristics, Issues and Educational Concerns 127
10. Scheduled Tribe Children: Characteristics, Issues and Educational Concerns 161
11. Social Disadvantage: Parental Life Style and Achievement 183
12. Policy, Planning and Programmes 193
13. Intervention Programmes and Strategies 203
14. Teaching the Socially Disadvantaged 235
15. A Perspective of Research on Socially Disadvantaged 243
Index 257

1

SOCIAL DISADVANTAGE: A Theoretical Perspective

Focus points

Is Social Disadvantage a 'Defect'? Is Social Disadvantage a fact of 'Difference'? Is Social Disadvantage an albie of educational neglect, culture conflict, cultural deprivation? Can one assume Social Disadvantage to be class specific (social or economic)? Does it vary in degree depending upon an ecological analysis?

These questions have perplexed critics of the Social Disadvantage, who raise their thumb on conceptualising the concept in a comprehensive way. The present chapter explains the position.

Whom should we call socially disadvantaged?

Inequality of distribution of personal and social resources has often been an important political and economic issue all over the world. In every society, there are groups of individuals who, for various reasons, do not enjoy the same share of wealth, social resources and recognition as others and, thus, are in a position of disadvantage. These individuals are typical in that they are more likely to be economically backward, to be discriminated against, to suffer from a sense of loss of pride and so on. If we spot children in the classrooms who are not doing well in terms of some set educational standard most of these children are likely to belong to these groups. These are also the children who are more likely to be at the lower end of the distribution of scores on standard tests of cognitive functioning including the tests of intelligence. The question whether poor educational and cognitive performances are the cause or the effect of belonging to a certain disadvantaged segment of the society does not still undermine the importance of the psychological dimension of poor educational and cognitive performances of certain identifiable segments of population.

Given that in every sphere of social life, economic, political, educational etc. there are some individuals who predominantly belonging to certain groups, are at a disadvantage. How are these individuals to be characterised? How, in other words, do we define disadvantage? There are primarily two different approaches to this problem. Cole and Bruner (1971) have characterised these as deficit and difference positions. The deficit hypothesis rests on the assumption that a community under conditions of poverty is a disorganised community, and this disorganisation expresses itself in various forms of deficits. In other words, a group of individuals, usually poor and belonging to a minority community can be characterised as disadvantaged because it lacks something very vital to proper growth of the individual. The concept of cultural deprivation is one form of deficit approach which states that certain individuals lack the adequate cultural up-bringing necessary to promote a sound personal and psychological development. The difference position, on the other hand, tends to look at certain groups, the disadvantaged, as merely different from others and only "the great power of the middle class has rendered differences into deficits because middle class behaviour is the yardstick of success. According to Cole and Bruner (1971) from this points of view, cultural deprivation represents a special case of cultural difference that arises when an individual is faced with demands to perform in a manner inconsistent with his past cultural experience. According to this approach, educational difficulties can be recognised in terms of a difference rather than a special kind of intellectual disease. The term social disadvantaged will now be interpreted in terms of the deficit and the difference positions.

Is it a deficit that one is talking about ?

Katz (1970) offered three interpretation of social disadvantage.

(a) Cultural deprivation hypothesis (Katz, 1964).
(b) Cultural conflict hypothesis (Riessman, 1962).
(c) Educational deprivation hypothesis (Clark, 1963).

The cultural deprivation hypothesis assumes that disadvantaged children's learning difficulties are due to failure of the socialisation process in the home. According to this view, early childhood experiences and environment of poverty create enduring personality patterns that inhibit achievement striving in the classroom. Harsh authoritarianism of parents, undersireable distance between parents and children, and exaggerated influence of the peer group as responsible for social disadvantage. An adequate socialisation leading to poor achievement need (n-Ach) due to matricentric structure of Negro family and persistence of child rearing practices that originated on slavery as characteristic of the disadvantaged. A number of other studies postulate specific deficits in parent child interaction patterns among the disadvantaged. The maternal teaching style among the disadvantaged parents are also said to provide less positive and more negative reinforcement to the children. Parents in disadvantaged homes provide less guidance in goal seeking by children.

White (1966) found that the poor mothers lack an adequate mothering style to bring up competent children. He emphasised four aspects of good mothering which the disadvantaged homes lack. These are:

(a) Language interaction with children,

(b) Firmness of maternal discipline,

(c) Mother's role in structuring the time and the task activities of the child, and

(d) availability of stimulation for manipulative activities in the home environment. This last aspect of the disadvantaged homes has also been emphasized in Piaget's theory of developments in which stimulus deprivation has been considered as part of the cultural deprivation. The most crucial impact of stimulus deprivation is perhaps experience in the field of linguistic interaction with the child. The linguistic interaction in the disadvantaged homes is characterised by a restricted language code quite limited in its scope compared to the elaborate code language of the middle class. A host of other deficits ranging from less opportunity for figure-ground formation due to a confused noise background in the homes to difficulty in accepting verbal reinforcement instead of tangible objects have been hypothesised. In essence, these deficits are assumed to result in·low test score and poor educational achievement among children.

The cultural conflict hypothesis propagated by Riessman (1962) states minority group cultures have defective systems of values and goals that are not taken into account in the schools. The values and objectives that the schools sponsor are not the ones the children of lower socio-economic strata (SES) want to adopt. Thus there is a conflict between the two sets of cultural norms as a result of which a segment of children in the schools find themselves at a disadvantage.

The educational deprivation hypothesis states that the cultural deprivation concept is an alibi for educational neglect. The schools and school administration neglect some children in the classrooms and thus contribute to social disadvantage by causing poor self-identity, low achievement, inadequate motivation etc. Concept of expectancy effect in the classroom also supports the concept of educational deprivation and its consequent effect. Coleman etal (1966) finding that Negro children perform well in integrated classroom is also an eloquent testimony of this.

Thus, inorder to explain poor social standing and educational attainment, the deficit approach emphasised lack of a number of factors leading to some sort of cultural and educational deprivation. In other words, the deficit of the disadvantaged is multidimensional. Measuring social disadvantage taking into account its various dimensions and consequence is also suggested. The model primarily deals with the effect of educational deprivation or an unsupportive educational climate.

Whiteman and Deutsch (1968) emphasised a series of conditions associated with deprivation and proposed the Deprivation Index as a measure of the degree of cultural deprivation. The problem of defining social disadvantage in terms of the deprivation approach is primarily related to the area of emphasis. So many areas of deficit have been proposed that it is quite difficult to settle the relative importance of different variables associated with disadvantage. Panda (1974) and Tripathi (1982) have discussed some methodological problems associated with research on the deprived children, emphasising the mediating process that intervene the antecedents and deficit consequences.

Can disadvantage be explained by using the concept of difference ?

According to Cole and Bruner (1971) when the minority communities or the poorer segments of a population are characterised as disadvantaged because they are deficient or disorganised one pertient question to be asked is "Disorganised from whose point of view"? Recently, social scientists have become increasingly aware of the competence and performance distinction particularly relating to subgroup and cross cultural differences in cognitive abilities. The concept of "Linguistic Deprivation" of the Negroes in North America is an example. Labov argued that white the Negro children's performance may be different from the While ones it can not be claimed that there is a real underlying competence difference. A number of other studies also show that sub-group differences may exist only at the performance level affected by situational factors which if taken care of will erase the obtained deficit. Differential adaptation to test situation may significantly affect the test performance.

Thus, according to the difference approach, sub-group differences, as well as cultural difference may be interpreted in terms of situational and experiential differences in application of certain skills rather than in terms of absolute differences in skills. In other words, not that the disadvantaged are really difficient in certain basic cognitive and scholastic abilities, they simply appear to be so because they do not for various reasons, apply their skills to perform at the same level, as the more advantaged middle class group. The difference approach explains observed poor scholastic and test performance of the disadvantaged primarily in terms of motivational differences, test and experimental biases, expectancy effects etc.

While both the interpretations of the concepts of social disadvantage have something to be said in their favour, analysis on these terms does not help us with a commonly acceptable definition of the socially disadvantaged. Adding to this uncertainty is a strong move among the current Psychologists to avoid any labeling of specific group of individuals.

In view of all these practical and ethical consideration, one has only to face the facts. The facts are that in every society there are sub-groups which are generally characterised by (a) poor educational and cognitive performance of its children, (b) a high level of uneducated or school drop out children, and (c) conditions of low socioeconomic status related to unemployment and under-employment. Thus while the philosophy of one's approach and explanation to these phenomena will vary one can at least say that these sub-groups of individuals do not get their due share of the society and its privileges and therefore, are at a disadvantage. In other words, one can define the socially disadvantaged as those groups of individuals characterised by poor educational and cognitive performance primarily due to a host of factors associated with belongingness to a poor and minority group subculture. But such a definition is bound to be elusively simple. It is better to discuss the various dimensions that would describe general character istics of the disadvantaged rather than to define the group in absolute terms. The intervening psychological processes, in many researches have not been specified.

The poor child lives in a deprived home and social environment, detrimental to the development of his personality. The urban slum child grows up in a home without stimulating cultural vistas and limited to learing a nonstandard language. Impoverished material and social environment block the natural development of the individual has been supported by several studies. Enriched environment compensates for the detrimental effects of earlier deprivation. Davis (1947) has described a case of extreme isolation. Isable, an illegitimate child, lived in an attic and was discovered at the age of six and half years. She had failed to develop speech. Her social maturity, as measured by Vineland Social Maturity Scale, was only two and half years. On Stanford-Binet test of intelligence, she had an I.Q. of only 25. The environmental deprivation had made her a psychological dwarf. After being discovered, she was given an intensive educational treatment for two to three years at the end of which she could catch up with her age group both in intelligence and scholastic achievement. The impoverished environment harms, the enriched environment not only helps, it also compensates for the earlier loss.

Different scholars have given emphasis on different dimensions of social disadvantage. Yet there seems to be a fairly sufficient consensus on the major themes which make the profile of a socially disadvantaged child. Coleman and Browen (1972, pp. 162-63) have identified five conditions in the families of the socially disadvantaged children on the basis of several researches in this area. These conditions are: (i) lack of cultural artifacts such as books, magazines, toys etc. and lack of cultural experiences such as visits to library, museum, zoo etc. (ii) limited parent-child interaction and the inhibiting nature of interaction, (iii) physical and arbitary punishment without any explanations, (iv) noise, overcrowding and disorganisation and (v) ineffective models of parents as teachers. The consequences of these familiar conditions of the sonially disadvantaged children are most marked in cognitive (perception, language, intelligence, learning and achievement), affective (personality, motivation) and physical or skills.

These dimensions are not all to describe disadvantaged children. The Disadvantaged Child lives in overcrowded housing, has low parental aspirations or suffers from absence of father. Whiteman and Deutsch (1968) included six variables in their Deprivation Index, namely housing dilapidation, parental educational aspirations for the child, number of children under 10 years, dinner time conversation, total number of cultural experiences anticipated by children in the coming week-end, for example, visiting museum, zoo etc.,and attendance of child in kindergarten. The social world of the urban slum child is characterised by uninformed parents, lack of parent-child interaction and identification and low self-esteem. The family of the Culturally Deprived Child is traditional, patriarchcal, superstitious and alienated. The socially disadvantaged children face economic deprivation, negative parental attitude to the child, inadequate and overcrowed housing, malnutrition, low parental education, poor household management and social deprivation.

What are the milestones?

Three characteristics have been usually identified. These are:

(i) Progressive decline in intellectual functioning.

(ii) Cumulative academic achievement deficit, and

(iii) Premature school termination or higher drop-out rate.

In the Indian context, Tripathi and Misra (1982) have included these under two factors : Physical and experiential deficiency.

Poverty is another way of looking at the problem of deprivation. Infact, Lewis (1966) had argued that "The Culture of Poverty" was different from the culture of affluence. The poor protects himself with a philosophy of life characterised by fatalism, present-time orientation, impulsivencess, inability to delay gratification, concrete as opposed to abstract thinking, inferiority, aggression, and authoritarianism. And then the poor is caught in a vicious cycle. He is trapped. His personality and attitudes which help him to adjust to the realities of his life also chain him to them, making a break and emancipation impossible. Several studies have challenged the thesis of "the culture of poverty" on empirical evidences. Billings (1974) on the basis of data from a sample of 11, 600 families from 20 countries, measuring such themes as fatalism, achievament orientation, outlook on future social class identification etc. has rejected the theory that poverty results from traditional cultural values. Coward et al. (1974) studied 271 Black subjects divided into "poor" and "non-poor" categories. They analysed their data using the four main dimensions of "the culture of poverty" and found no support for Lewis thesis. Instead, in some of the dimensions their findings contradicted Lewis. Davidso and Gatieg (1974) in order to answer the question; "Are the poor different"?, compared the work behaviour and attitudes of a sample of 1441 cases divided into poor and non-poor categories. There was no confirmation for the concept of "the culture of poverty".

The suggestion that the individual causes his own poverty and is totally responsible for his socio-economic conditions is as incorrect as heartless. The main characteristics of personality are determined by the life-experiences. Ofcourse a few very poor but brilliant persons have achieved high social mobility like Abraham Lincoln and Vidyasagar.

"The culture of poverty" economic or psychological (affective) perpetuates itself with subtle support by the social system, by means of labeling and stigma which make perceptions of society biased. Labeling itself may become the cause of unhappy experience, such as discrimination. Expectations of the teacher is influenced by her knowledge of student's I.Q. and social background and in turn, the student is influenced by the expectations of him held by this teacher. The cumulative deficit notion is another dimension which mirrors the disadvantage.

The socially disadvantaged child is inferior in intelligence and academic achievement has been demonstrated by the phenomenon of cumulative deficit reported by several scholars. The difference between the intelligence of the socially advantaged and advantaged children increases with age. In earlier years the difference is negligible, but as the socially disadvantaged child is hampered by the limitations of life and the advantaged child facilitated by the opportunities, the gap widens and becames wider and wider. This is related to the degree of social disadvantage. The degree of social disadvantage was based on four factors, namely: income, caste, ethnicity, status, rural urban residence and sex. The most disadvantaged category was of low income, low caste, tribe, rural female and the most advantaged was of high income, high caste, urban male. The extremely advantaged group was superior in intelligence and scholastic achievement. Even when the two groups were matched on intelligence the advantaged group was superior in scholastic achievement. Greater is the degree of social disadvantage, greater is the harmful effect on intellectual and language development.

The ecological framework gives the answers

Sinha (1982) proposed an ecological model of deprivation. Ecology in its wider sense is not confined to merely physical environment, but comprises the socio-cultural setting in which the individual operates. Ecology consists of:

(a) A conceptualisation of psychological adaptation in terms of person-environment fit or congruence.

(b) A concern with effective coping.

Ecological perspective views psychological processed in true transactional terms. Ecology provides a useful framework for under standing psychological processes related to deprivation in terms of state of art research and application of findings for intervention. Ecological model has been conceived in terms of two concentric layers. The upper layer contains home, school, peer group each providing 3 dimensions physical social role and relationships and activities. The surrounding layer consists of the physical environment and institutional setting in terms of social class, caste, general services and amenities available to him. The three important factors are : Home, School and Peer group. These factors interact among the child's ecology but their influences are not always visible and are diffused.

The visible and surrounding layer interact and combine in influencing economic pursuits, way of life, but also the socialisation process and inter personal relationships and the general cognitive and perceptual functioning of the individual. Bronfenbrener (1977) has suggested ecology of human development as "the scientific study of progressive mutual accommodation throughout the life span, between growing human organism, and the changing human environment in which it lives, as this process is affected by relations obtaining within and between their immediate setting, as well as the larger social contexts, formal and informal in which the settings are embedded. The conception of environment is more inclusive, differentiated and implicit than usually found in psychology.

In this case, deprivation can be conceived as certain deficiencies characterising one or more of these systems with which the individual has to cope constantly. The more the factors involved, the greater is the degree of deprivation. The systems are :

Micro system: Relation between individual and environment within home, school, work-place etc.

Messo system : Inter-relations between major settings containing the developing person at a particular point in his life i.e., families, school, peer group, religious group.

Exe system : It is an extension of messo system to neighbourhood media, govt. agencies, world or work, communication facilities which influence the individual.

Macro system : Culture, sub-culture, economic, social, educational system which influence the individual.

There is however, a need for reconceptualisation of deprivation or social disadvantage in the Indian socio-cultural context. The concept of prolonged deprivation by Misra and Tripathi (1980) aims at characterising the variations in psychological functioning of an individual in terms of his total experiential background. This experience of individuals vary in quantitative and qualitative directions. Hence, deprivation or disadvantage has to be treated globally and should include all aspects of life in a specific culture and during life time. Accumulation of experiential variety and extent is an outcome of relatively longer periods in a natural setting. The prolonged deprivation (Misra and Tripathi, 1980) approach involves all aspects of life experiences and has empirical referents.

Highlights

Social Disadvantage is multidimenisonal. It is characterised by experiential deprivation in family, school and society at large.

In its conceptualisation, socialisation practices, socio-economic conditions, educational deficiencies, physical and nutritional factors, unstimulating environment leading to sensory deprivation, all play their contributory roles. These however, sometimes camouflage the class specific nature of disadvantage because of predominance of cultural of factors, which is not true. Social Disadvantage varies according to prolonged variations in deprivational conditions.

REFERENCES

Billings, D. (1974). Culture and Poverty in Appalchia : a theoretical discussion and empirical analysis. Social Forces, 53, 3, 315-323.

Bronfenbrenner, U. (1977). Towards an experimental ecology of human development. American Psychologist, 32, 513-531.

Clark, R.B. (1963). Educational Stimulation of Racially Disadvantaged children. In A.H. Passow (ed) Education in depressed areas. New York Teacher's College. Columbia University Press.

Cole, M. and Bruner, J.S. (1971). Cultural differences and influences about psychological processes. American Psychologist. 26, 867-876.

Coleman, J.C. and Browen, P. (1972). Abnormal Psychology and Modern life. D.B. Bombay, Taraporavilla & Sons.

Coleman. J.S. etal., (1966). Equality of educational eppertunity. Washington, DC. Dept. of Health, Education and Welfare. US Govt. Printing Office.

Coward, B.E., Joe, R.F. and Allen, J. William (1974). The culture of Poverty Debate: Some additional data. Social Problems, 21, (5) 621-634.

Davis, K. (1947). Final note on a case of extreme isolation, American Journal of Sociology, 57, 432-457.

Davidson, C. and Gatieg, C.M. (1974). Are the poor different ? A Comparison of work behaviour and attitudes among the urban poor and non-poor. Social Problems. 22, 2,229-245.

Katz, I. (1964). Factors influencing Negro performance in the desegrated school. American Psychologist, 19, 381-399.

Lewis, O. (1966). The culture of poverty, Scientific American, 215, 19-25.

Misra, G. and Tripathi, L.B. (1980). Psychological consequences of Prolonged Deprivation. National Psychological Corporation, Agra.

Panda, K.C. (1974). A process model-approach for research into the retardate's parental family : Theoretical and methodologial considerations. Indian Journal of Mental Retardation, 7, 14-24.

Riessman, F. (1962). The culturally deprived child. New York: Harper and Row.

Sinha, D. (1982). Towards an ecological framework of deprivation. In D. Sinha, R.C. Tripathi, and G. Misra (eds) Deprivation: Its social roots and psychological consequences. New Delhi: Concept, Ch. 2.

Tripathi, R. (1982). The concept of deprivation: Some issue. In D. Sinha, R.G. Tripathi, and G. Misra (Eds) Deprivation· its social roots and psychological consequences, New Delhi: Concept. Ch. 2, pp 5-16.

White, B.L. (1966). Informal education during first months of life. Paper presented at the Social Science Research Council Conference on Pre-School Education.

Whiteman, M. and Deutsch, D. (1968). Social Disadvantage as related to intelligence and language development. In M. Deutsch I. Katz and A.R. Jensen (eds) social class, Race and psychological Development. New York: Holt, Rinehart, Winston, Inc.

2

MEASURING DEPRIVATION

Focus points

Are there many measuring techniques of Social Disadvantage as there are researchers and researches? Does this variation affect quality of generalisations derived from research?

Are the prevailing scale of measuring Social Disadvantage by and large measurement artifacts ?

The chapter examines the limitations and merit of the available scales and goes a step forward in enlighteening readers about the relevance of a scale which measures experiential deprivation on a continuum.

How do we measure disadvantage ?

There has been numerous studies on deprivation during the period following 1960s. Measurement has taken two lines. In one case, measurement of deprivation has followed a nominal scale (poor, rich, slum) or ordinal scale (High, Medium, Low) which is not the reality. Whiteman and Deutsch (1968) reported another line of investigation in terms of sensory deprivation in institutions, orphanages. These are correlational approaches. Laboratory studies on deprivation are experimental but these are mostly conducted on animls and inferences are drawn for human beings, therefore, findings have less meaning in terms of real life situations.

On the otherhand, if one observes the large number of studies conducted on human beings, there has been wide variations in the use of the concept of deprivation. Hence, measurement of deprivation lacks precision and fails to clarify conceptually and methodologically, for a long period. Therefore, interventions appear fruitless.

The terms 'Socio-cultural Disadvantage', 'Underpreviledged', 'Social Deprivation' or 'Social Disadvantage', 'Cultural Deprivation' are commonly used to explain social disadvantage. The methodological issues measuring deprivation have been amply discussed in Chatterjee (1982). It is not a nominal variable. Experience which varies in quantum and nature is the basis of explaining deprivation, therefore, should form the basis of measurement. Initially attempts to study deprivation was made by Davis (1968) using a 7-point rating scale and with limited factors. Munsey (1971) made the next attempt in which he developed a cultural deprivation index and included, income and area of residence. Whiteman and Deutsch (1968) developed a more realistic but not quite intensive measure for finding "deprivation index" in which a number of basics social conditions were included. The details are given below to indicate environmental disadvantage. In this case the composite index is used rather than each factor score.

DEPRIVATION INDEX
(Whiteman and Deutsch, 1968)

Variables.	Dichotomised for scoring purposes.
1. Housing dilapidation Index for block an which S resides and assigned to him, computed from census data.	1. Anything less than sound with complete plumbing. 2. Sound with complete plumbing.
2. The educational aspiration level of the parent for the child.	1. College or less. 2. Graduation professional training.
3. The number of children under 18 years of age in the home.	1. 3 or more. 2. 2 or less.
4. Dinner conversation.	1. Did not engage in conversation. Not allowed to. No conversation. Ate alone. Others participated but the child did not. 2. Engaged in conversation.
5. Total number of cultural experiences anticipated by the child for coming week end visiting relatives, family etc.	1. None. 2. One or more expense (1 to 4).
6. Attendance of child in kindergarten.	1. No attendance at kindergarten. 2. Attendance at kindergarten.

1, 2 are points for scoring.

They included the six variables such as housing condition, educational aspirations of the child, number of children under 18 years of age in the family, number of cultural experiences, dinner time conversation, attendance of the child in kindergarten. These variables were related to reading ability and SES. The scale was validated on 294 children and was widely used by authors. This is the pioneering attempt in the field in terms of specificity at that point in time. It has been widely used (Whiteman and Deutsch, 1968).

Rath and Samant (1975) had developed a cultural deprivation index in Indian setting using 14 factors of socio-cultural disad vantage. Ratings determined the scale values of each factor with N=90 P.G. students as raters. The deprivation score was the mean of the scale values on the fourteen factors. Not much research has emerged from this index except for its origin.

The other approaches in use include caste, comparisons, race rural-urban, and SES. This is acceptable at a very macro level of analysis and is quite convenient and popular but in a country like ours hierarchical status of caste, confounded with economic, cultural and educational deprivation makes any kind of deprived/non-deprived category superflous even though by statistical techniques certain extraneous and confounding or overlapping effects are isolated. Yet it is a disturbing sign for accepting generalisation as valid.

There has been several techniques measuring deprivation using SES but these socio-economic status scales are more localised, individualised and lack comprehensiveness in terms of accounting the experiential input. They are absolutes and nominal categorical from which only gross generalisation could be made. In studies using these scale deprivation as disadvantage is assumed to be a direct function of some social or economic stratification. A significant correlation or difference does not clearly indicate quantum and nature of deprivation unless microscopic analysis of deprivation experiences are made. These are essential for process based interventions.

Methodological limitations of SES scales as a measure of deprivation in studies have been analysed systematically by

Chatterjee (1982) who observed U-shaped curve or V-shaped curve with regard to effect of SES on cognitive functioning. This is true because the culture of urban slum for example, or of the back ward rurals may have built-in disadvantage in terms of money and materials, but perhaps not so in terms of availability of stimulation which may instigate behaviour, learning and adjustment of different types. Failure to recognise this possibility of nonlinearity and non-monotonicity of relationship between SES and other dependant variables may lead to erroneous conclusions. Chatterjee (1982) lists as may as 77 studies with SES, deprivation, disadvantage, handicap and achievement (e.g., SES: n-ach, academic achievement, cognitive abilities, intellectual performance, language, perceptual skills, verbal ability etc.). He also analysed as many as 23 studies where other psychological functions have been studied with regard to SES or any other nominal measure of disadvantage. The misleading relationship have been presented below. The studies relates to 1965-1975.

Table 2.1: Relationship between SES, Disadvantage, Deprivation, Deficit, Handicap (independent variables) and achievement and performance (dependent variables).

S.No.	*Types of Relation*	*Number*	*Percentage*
1.	Clear monotonic relation.	31	40.25
2.	Monotonicity in some, lack of monotonicity in the same study.	8	10.38
3.	Monotonicity unclear.	10	12.98
4.	Absence of monotonicity	12	15.58
5.	Non-monotonicity of relationship.	5	6.49
6.	Within group remediation.	9	11.68
7.	Remediation unsuccessful.	2	2.59
		77	100

Table 2.2: Relationship between SES, Disadvantage Deprivation, Deficit, Handicap (independent variables) and achievement and performance (dependent variables) and other psychological functions (Self-concept, value etc.)

S.No.	*Types of Relation*	*Number*	*Percentage*
1.	Clear monotonic relation.	3	13.04
2.	Monotonicity in some, lack of monotonicity in the same study.	3	13.04
3.	Monotonicity unclear	1	4.34
4.	Absence of monotonicity.	8	34.78
5.	Non-monotonicity of relationship.	4	17.40
6.	Within group remediation.	4	17.40
		23	100

The results showed that in Psychological functions other than in achievement and performance, the impact of SES deprivation, disadvantage, handicap is still more unclear. However. remediation programmes were able to compensate for deficits generated by poverty and impoverishment. Hence, one has to be quite precise in measuring deprivation and careful in labeling children into categories on the basis of SES or any such nominal measure.

Anand Lakshmy (1982) visualised deprivation in terms of poverty or low economic conditions which leads to a subculture itself self perpetuating and self-defeating. In her opinion, the culture of poverty is not so narrow and confined to economics alone, it is ecological. Normally several attributes are attributed to the poor i.e., low self-esteem, sense of inefficacy, passivity, restriction, of language, leading to stero-types about the poor and under privileged which perpetuate from generation to generation. The same type of stero-types persists especially with reference to caste and class. She has from various angles came to the point of conceptualising distal and proximal variables. Most of the studies have ended to take the distal variables, of poverty conditions or socio-economic status as the independent variable without considering the proximal factors into consideration. She has adapted a model of variables from

US dept. of Health, Education, Welfare 1968 which is stated as follows. Her argument is one can proceed from A to E systematically for measuring deprivation and its effects instead of jumping from one to the other.

Environment. *A* *Distal.*	*Attributes.* *B* *Proximal.*	*Person Attributes* *C*	*Behaviour.* *D* *Proximal.*	*Attributes.* *E* *Distal.*
Race	Social evaluation.	Skills.	Aggressiveness.	social failure.
Social Class.	Reactions.	Beliefs.	Withdrawal.	Delinquency.
Urban ecology.	Parental teaching modes.	Motives.	Discrimination	Inter group hostility.
Ethnic Status.	Teacher expectation affectional climate	Interests altitudes identities.	Reading deficiency.	Psychological theory.

She suggests that proximal variables are to be taken into consideration and not only distol ones an idea which was suggested by Panda (1974) introducing process variables in research while measuring deprivation, or drawing any causal relationships.

While Anand Lakshmy's ideas are pragmatic, she has not really developed any measuring instrument. It seems attempts for identifing the socially disadvantaged has under gone serious changes but not in systematic directions. The concept has been articulated well and variables are to be specified in the measurement device.

The basic assumption is, children live in family and community. The socio-cultural life within these two basic units provide of psychological, physical, social, economical and other facilities: biogenic and sociogenic. These experiences acrue over time and influence various functioning of the individual. Misra and Tripathi (1977) conceptualised experience in terms of time dimension taking into account the range of environmental and interactional variables contributing to experience.

The prolonged deprivation scale

The prolonged deprivation scale (Misra and Tripathi, 1977) measures deprivation in terms of severity and comprehensiveness on a time dimension. The PDS measures deprivation in an enrichment impoverishment bipolar continuum. The scale consists of 96 items.

The 96 items cover 15 areas relating to socio-cultural experiences. The areas are :

(a) Housing condition.
(b) Home environment.
(c) Economic sufficiency.
(d) Food and nutrition.
(e) Clothing.
(f) Educational experiences.
(g) Childhood experiences.
(h) Rearing experiences.
(i) Parental characteristics.
(j) Interaction with parents.
(k) Motivational characteristics.
(l) Emotional experiences.
(m) Religion.
(n) Travel and recreation.
(o) Miscellaneous socio-cultural experiences.

The investigator is required to rate on a five point scale the information pulled for the respondent on the basis of interview and observation made in the residence of the respondent. The data were originally collected from 471 respondents representing all kinds of communities and locations in the range of CA 15-20. After standardisation 600 more data were collected to factor analyse the scale. Two factors emerged : Physical and Psychological. Psychologically the scale is sound enough for use in any society after translation into their language. The inter rater reliability obtained by 4 investigators ranged from .55 to .95. The average Z transformation being .91 and index of reliability .95 which is fairly high. The test reliability and split-half reliability index were respectively .77 and .95 with a fairly normal distribution of responses as indicated by the test of goodness of fit.

As regards validity, content validity, intrinsic validity, predictive validity, construct validity, and factorial validity were established by the authors. PDS has attained acceptability in a theoretical and empirical front. Yet it has taken deprivation as a global experience without bringing each area of experience into analysis as an independent index. This is also not desirable inspite of criticisms because behavioural or cognitive deficiencies can not be that miscropically related to a single sub-score as in real life the situations are not that artificial. It has viewed deprivation in absolute rather than in relative terms. Inspite of these minor limitations it is the most called for index of deprivation.

Highlights

Measuring social disadvantage using nominal or ordinal scales or using a single (SES) or group of dimension rural-urban, High Caste-Low Caste, Educational level, Language are piecemeal and inadequate. Even the Deprivation Index has an artificially dichotomising tendency when disadvantage arising out of experiential deprivation occuring at a variant ecological level is a relatively more continuous in character. Deprivation varies in degree by subsuming variations in kind. The prolonged Deprivation scale is the only available measuring instrument which can also offer specific clues to even designing intervention. This would be a step forward in making research on Disadvantage generalisable.

REFERENCES

Anandlashmy, S. (1982). There is a method to the measurement. In D. Sinha; L. Tripathi; and G. Misra (Eds). Deprivation: Its social roots and psychological consequences. New Delhi: Concept. Ch. 4. 37-48.

Chatterjee, B.B. (1982). Methodological implication of using the socio-economic status scale as a control variable in disadvantage Deprivation Studies. In Sinha, Tripathi and Misra (1982), Ch. 6, 73-102.

Davis, R.E. (1968). Social deprivation and cognitive functioning in lower class children. Dissertation Abstracts, 29. 1105-1506.

Misra, G. and Tripathi, L.B. (1977). The concept of prolonged deprivation and its measurement. Indian Journal of behaviour, 1, 48-60.

Munsey, W.L. (1971). Development of an index of cultural deprivation independent of ethnic group membership. Disertation Abstracts, 32, 30-50.

Panda, K.C. (1974). A process model approach for research into retardates parental family. Theoretical and methodological consideration. Indian Journal of Mental Retardation, 7(1), 4-24.

Rath, R. and Samant, C.R. (1975). Construction of the scale of cultural deprivation and its application. Unpub. Master's Thesis, Utkal University.

Whiteman, M. and Deutsch, M. (1968). Social disadvantage as related to intellectual and language development. In Deutsch, M. et. al. (Eds). Social class, race and psychological development. N.Y. : Holt, pp. 86-114.

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SOCIAL DISADVANTAGE AND COGNITIVE PROCESS

Focus points

What does one mean by cognitive process with reference to Disadvantaged? What is the nature of their perceptual functioning? Has culture to do anything with perceptual process in case of disadvantged? Do caste and economic status play major interacting role? How far prolonged deprivation affect cognitive processes? Does nutrition play a major role in cognition? What do researches say? The chapter tries to examine the answers to these querries in order augment intervening processes in a positive way to help the Disadvantaged.

How is social disadvantage related to cognitive process?

Cognitive functioning refer to the processes by which the sensory input is transformed, reduced, elaborated, stored, retrieved and used. It includes all the processes involved in apprehending environmental stimulations encountered by the organism. Cognitive capacity and processes vary due to differences in experiential input.

For example, children who belong to the deprived community are characterised by deficiencies in cognitive, affective, and physical development. The cognitive characteristics are concerned with perception, thinking, reading, language, intelligence and scholastic achievement. Children reared in slum and rural areas are deprived in any one or on all of these cognitive processes. There is a close relationship between cognitive processes with sensory deprivation and cultural background. Children who are in orphanges and institutions suffer from adequate stimulation and experience, thus display poor cognitive functioning. Membership in lower social class has also led to poor cognitive ability.

Visual perceptual skills as well as field articulation are inferior among culturally deprived children. Whiteman and Deutsch (1968) demonstrated self-perception and verbal ability to be related to deprivation. Sinha and Sukla (1974) reported detrimental effects deprivation on.depth perception. Deprivation also effected field independence scores, cognitive functioning learning and concept formation.

The explanation which have been offered for these deficiencies are experiential deficits both in terms of the availability and given conditions of learning including environmental factors associated with social class and race. Cognitive deficiency has been attributed to stimulus deprivation also. In deprivation, there is little or no environmental input. Tannenbaum (1969) believed deprivation as a condition in which the individual cannot selfactualise, hence, is psychologically deprived or socio-culturally deprived.

There has been several arguments, ranging from conceptual to methodological issues in the context of hard core psychological interpretations of deprivation and cognitive functioning relationship. The concept of deprivation has been differently defined and the procedure of identifying a disadvantaged child is also varied. The facts however, remain that deprivation is an impoverished condition in terms of experiential input. This varies in degree and range, not typically attributable to a class or group. It is multidimensional and has different layers as explained in the ecological model of deprivation.

It is an established fact that experience or stimulation or interactions in family during early childhood is important. Hunt's (1964) treatise "Intelligence and experience" is a testimony that intelligence is not fixed. Piaget (1947) believed growth of logical thinking in children by reaching and not by teaching. Hence, variation in experience would eventually lead to variation in cognitive competence and development of cognitive processes.

The consequences of the cognitive deficiencies are also complicated by their pattern of motivation and attitudes. For example, these children have a feeling of alienation induced by family climate and experience combined with a low self-concept. They tend to question their own worth, to fear being challenged, and to exhibit a desire to cling to the familar. They have feelings of guilt and shame. These children are wary, and their trust in adults is limited. They make trigger like responses and are hyperactive. They are quick to vent their hostility orally and physically. In other words, they are apathetic, unresponsive and lack initiative. It is difficult for them to form meaningful relationships.

These characteristics are rooted in early childhood, family background and social class membership of the family. Yet the attitudes of the teacher and the curriculum in the school increase the alienation of these children. Very often there is communication gap between the teacher and the students, the objectives of instruction and the actual evaluation of instruction in terms of pupil performance as well as discontinuities in the meanings attached to verbal cues employed in teaching and curriculum materials and the meanings which these children have acquired in their out of school experience. In the educational provisions for the under privileged, the task of the school should also be refined not as a cause for contributing to deficts in these children but as an institution in the best position to affect the change. The preschool programme and compensatory programmes for the education of the underprivileged can work at the hands of these teachers.

Infact, the interest for research on cultural deprivation came from researches on carly experience and sensory deprivation in comparative psychology, Animals raised in restricte environment showed deficits in sensory and perceptual development. Hunt (1961) extended the implications of this to humans and pointed out the importance of early experience in scholastic attainments. Haywood and Tapp (1966) stated that an enriched early environment increased intelligence, whereas impoverished environment may lower the intelligence level.

How about the perceptual functioning of the disadvantaged?

It has been stated earlier that studies on cognitive functioning began with sensory deprivation on animals with a strong belief that lack of stimulation causes disorganisation in cognitive processes particularly to start with perceptual ones. Early sensory deprivation is especially harmful for cognitive development. Sensory deprivation adversely affects the development of perceptual skills. Covington (1967) has studied stimulus deprivation as a function of social class. He found that on a thirty-item task requiring discrimination, children of low SES had lower scores than children of high SES. He then formed controlled and experimental groups in each of the two socio-economic groups. The control groups were exposed to animal pictures. The experimental groups were exposed to abstract test forms. Both the experimental groups of high SES and low SES profited much and the low socio-economic groups benefited more by the exposure. Social or physical peculiarities in ecology produce culturally distinctive disadvantages in interpreting pictures. Due to infrequent exposure to varied stimulating environmental conditions disadvantaged children seem to lack adequate perceptual constancy and discrimination (Hudson. 1967).

Has culture anything to do with perception of the disadvantaged?

The influence of culture on Visual Perception was studied by Segall etal. (1966). It was found in this study that visual illusions are influenced by cultural background, because "to a substantial extent we learn to perceive". Perceptual inference habits are formed differently in different cultures. Sinha (1975) has examined the influence of age, schooling, and socio-economic factors in the development of certain perceptual skills. He found that caste-status and quality of school affected the performance on the interpretation of pictorial cues and sequential perception. The children from lower SES studying in inferior schools were slower that the children from high SES and reading in good schools. The poor children became increasingly more inferior indicating the effect of cumulative disadvantage. Sinha and Shukla (1974) compared children from orphanages and normal families on interpretation of pictorial depth cues. The two groups were matched on age and intelligence. Though the pattern of perceptual skill was similar in two groups, they differed significantly on the level of their competence.

Children of middle SES are superior in tests of auditory discrimination than the lower class children. Cravioto et al (1967) have reported that malnutrition in the early years adversely affects the auditory-visual integration and poor reading ability. In poor homes noise makes organised and sustained conversation impossible and prevent the child from learning to recognise and distinguish the speech sounds.

The lower achievement of disadvantaged children could be attributed to atleast five causes: malnutrition, genetic, lack of stimulating early experience, social motivations and cultural values. In addition, the cognitive style or strategy adopted by a group may account for the lower performance of the disadvantaged children. Jensen (1971) has demonstrated that children from low SES use associative learning strategies and evidenves are found to suggest that low SES children use sequential processing than simultaneous processing in tasks which demand simultaneous processing. Das (1973) on the basis of a series of studies in India, has reported that high caste-status and high income help the development of cognitive competence. Both caste and income separately and independently have their impacts.

Das and Singha (1975) studied the effects of caste-status and income-level on the performance of several cognitive tasks such as Raven's Coloured Progressive Matrices, Graham Kendall's Memory for designs, Cross-modal coding, Visual short-term Memory, Figure copying etc. The performance of the low caste children was inferior compared to that of the high caste children. The rich Brahmin children with the double advantage of high caste status and high income were superior to all. The authors have suggested a general orientation for explaining performance deficits in low SES children. Following Luria one may view scholastic performance as "a social phenomena in origin and as processes formed during the course of mastery of general human experiences". They are shaped by the experience through which a sub-group passes.

Besides, the gap between a culturally disadvantaged child and a normal child begins to grow with age and exposure to classroom learning. The verbal milieu in which the middle child grows up corresponds much more closely to school learning situation. The middle class child most often has a superior quality of both verbal and non-verbal stimulation at home. The stimulations are distinct and the reinforcement system in a middle class home are of a delayed kind which is congruent to life and classroom situations. These are not so in a poor class home.

In India, social cultural disadvantage is not very clear cut. All low income group children are not necessarily at disadvantage. The high caste is supposed to have a culture superior to that of the low caste Harijan given the same low economic status. The cumulative effect of these widens the gap between Brahmins and Harijans. There are empirical findings which support the cultural effect of high caste income. The rich high caste parents showod significantly greater interest in the child's educational progress. They had knowledge of child's educational progress and showed higher aspiration of the children and also made preparations for the child's education. The poor non-orthodox Brahmins were similar to the rich Brahmin which was a bit unexpected. The orthodox high caste and poor low caste had similar but low expectations. May be orthodox parents do not value expectancy so much. No difference in personality was observed although the authors expected that low caste children would be more fatalistic.

The result failed to support that birth in the Brahmin caste had an absolute advantage in cognitive abilities. Economic prosperity on the other hand, reflected more of an advantage than high caste birth. In other words, the least disadvantage children performed best in a majority of cognitive task. The poor Brahmin and Harijan children did not differ significantly possibly because they all came from the capital city i.e., an urban environment, which is varied and stimulating and the Harijan children have grown up in such an environment. Consequently the disadvantage of belonging to a culturally deprived home is greatly compensated.

Panda and Das (1970) examined the relative effects caste and class as factors influencing performance on stroop test and two verbal conditioning tasks. one hundred and sixteen boys aged between 8 and 10 years were used as Ss. They were reading in grades 4 to 6 in the same schools. On the parental income and caste they were divided into Rich(R) and Poor(P) Brahmins(H) and Harijans(L). Each of the four groups HR, HP, LR and LP had 29 Ss with comparable mean (from 9 to 9,6 years) and grade. Belonging to high caste and to the high economic class seems to be associated with faster reading speed. The superiority of the high caste over the low approaches a statistically significant level but it was consistent with an earlier finding (Das, Jachuck and Panda, 1970) and may be traced to the scholastic traditions of in high caste homes. The rich poor difference was not obtained in the earlier study in which the groups were much closer in income. When the contrast in the economic levels is increased, the rich have an advantage over the poor in reading speed.

Das, Jachuck, and Panda (1970) studied the effect of caste and cultural deprivation on cognitive growth taking sample of Brahmins and Harijans from Bhubaneswar, Orissa. They divided the Brahmin and the Harijan groups into "rich" with income of rupees 200 per month or more, and "poor" with income of less than rupees two hundred per month. Raven's progressive coloured matrices, the Stroop test, short-term memory test and recognition test were administered. On Progressive Matrices the rich Brahmins were superior to all other groups, the poor Harijans being the most inferior and the middle position being occupied by the poor Brahmins and rich Harijans. In reading speed the Brahmins excelled Harijans regardless of income group.

Is incompetence largely determined by the sub-culture to which a child belongs at birth? Is it stamped in fortuitously because of his indelible identity with a certain caste and class? Does this disadvantage affect the child's cognitive growth adversely? Das, Jachuck, and Panda (1970) answered these questions experimentally.

The cultural milieu in this reference is the caste to which a child belongs. The children were drawn from the Municipal Schools of the city of Bhubaneswar. The children of Brahmin caste constituted the High caste and Harijans represented low caste group as usual. Rich and poor classifications were done on the basis of parental income A child was included in the poor category if his parental income is less than Rs. 200 p.m. The children of professionals were included in this high income group. The children belonging to Rich Brahmin, Rich Harijan, Poor Brahmin, Poor Harijan were in the age group of 9-12 and were given Raven's Progressive Matrices Test, a test for short term memory, and a recognition test. Except for RPM, the rest of the tests were administered individually.

Progressive Matrices Scores were available for the rich Brahmin, poor Brahmin, rich Harijan and Poor Harijan. The mean scores for these groups were 22, 22, 19.30, 19.38 and 17.22 respectively revealing a hierarchy of rich Brahmin at the top, poor harijan at the bottom. It seems as though the Harijan has compensated for his low caste status by wealth as much as the Brahmin has lost his advantage by poverty.

In reading speed, the Brahmins excelled the Harijans regardless of economic status, whereas in colour naming speed the rich were superior to the poor. Short term memory scores were available for 27 rich Brahmins, 25 poor Brahmins, and 28 poor Harijans. Other Ss dropped out from school and could not be traced. Results of t-test showed significantly poor recall scores of the Harijan sample compared to poor Brahmins and rich Brahmins. The study of course did not answer whether Harijans had a poor capacity for recall or inefficient coding in STM task.

The recognition experiment yielded two scores for each subject: correct recognitions for unimodal and crossmodal tasks. Harijans committed a large number of errors in writing auditory material. These errors would obviously make it hard for the Harijan child to profit from classroom instruction. Harijan children were found to have relatively less facility with cross-modal coding than with uni-modal coding, although they shared this poor Brahmin children. From the results it appears that belonging to a low caste appeared to account for the inferior performance of a child in some cognitive task. It seemed as if caste were one's destiny.

Evidence of the low deprived children doing better than the non-deprived group has come from the studies of Tripathi and Misra (1975). They found that on six tests of cognitive functions and mental ability the low deprived group did better than non-deprived group. Castewise analysis did not show any difference, implying there by that SC/ST did as well as born highs. Gokulanathan and Mehta (1972) reported higher n-ach for tribal than non-tribal high school children. Mehta (1969) did an extensive and intensive study supported by NCERT on the achievement motivation of tribal non-tribal high school boys. The results corroborate the above conclusion that tribals are high n-achievers that the non-tribals.

Deprivation affects performance of these young pupils over a variety of situations having different educational relevance and achievement related dymamics. Das and Panda (1977) found that, on intellectual achivement responsibility attribution in failure situations the high caste children were more internal and Harijan children were more external. The Brahmin and Harijan children significantly differed in the style of information processing i.e., the Brahmin children were more analytic than the Harijan children. They had also more positive self-esteem compared to the Harijans and the discrepancy increased with increasing educational levels. Coming to intellectual performance, effects for caste was significant for digit forward and backward, reflective mode of responding perserverative errors in concept learning nonperseverative errors in concept learning, word recognitions with reference to acoustically similar and Neutral words, performance in digit symbol test, Memory for designs, verbal quantitative and total achievement scores on the basis of teracher made test. In all these tests the nature of performance was superior in the high caste group, moderate in the middle caste and low in the Harijan group. Further, castes x educational level interactions were significant and ordinal in respect of response latency i.e., with increase in educational level high and middle caste children became more reflective and low caste children became comparatively more impulsive. Deficit in concept acquisition with respact to form became more with increase in educational level. Perseverative errors were less with higher caste group compared to low caste. Recognition scores for orthographic words were progressively superior in high caste group children than low caste groups. Memory for design, verbal and achievement scores supported the "Broomstick effect" in the verbal and achievement scores supported the "Broomstick effect" in the caste group.

Many the results supported that with exception to basic intelligence where group difference did not occur between different castes, groups the low caste children did show deficits in personality, information processing modes, and intellectual achievement. And the deficits also indicated progressive or cumulative retardation in most of the measures. Hence, in our cultural background, memberships in low caste and low income family do predispose children to an impoverished environment and the consequences of this deprivation are cumulative over time.

Rao, (1976) in his experimental investigation of children's concepts of mass, weight, and volume has found that the children of higher socio-economic status have better performance and the difference between children of low and high socio-economic groups is greater in higher age groups. Tripathi and Misra (1975, 1976) have reported that prolonged deprivation damaged various types of cognitive processes such as depth perception, perceptual identification and conceptualization. Prolonged deprivation had negative relationship with cognitive efficiency.

Lesser et. al. (1965) found that the children from low socio-economic class did badly on tasks demanding verbal ability, reasoning number facility and speech conceptualization. Jensen (1966) found that due to decreased exposure to varied stimulating environmental conditions disadvantaged children are found to be extremely low and underdeveloped in perceptual discrimination.

Disadvantaged children lack in efficient depth perception, perceptual, differentiation, categorisation, identification, conceptualisation, and several perceptual activities. On the other hand when indegenous or ecology specific test materials are used difference in concept formation was not observed. This has serious implications for curriculum developers for education of children.

Disadvantage of one sort or another influences perceptual skills. The nature of environment according to Sinha (1982) provides the necessary sensory input, stimulation, and experimential base for the development of percepsual skills of various kinds. Sinha (1982) attempted to explain: Social disadvantage due to inferior castestatus and poor quality of schooling would produce a general detrimental influence on the development of perceptual skills. There were three variables in this investigation: age, caste status, quality of schooling. The age range was 4-10 which had 3 groups 4-5, 7-8, 9-10 years. In each age group boys belonging to SC and Non SC were drawn from superior and ordinary schools. Each cell had 20 SS. Schools were categorised as good and poor on the basis of educational and other facilities. Both SC and Non SC children were drawn from the same school to control school effects. Two pictorial tasks were presented : Pictorial interpretation and sequential perception. The first test consisted of 3 pictures (i) Cat and the Rat (ii) Two warriors and lady (iii) Man and Monkeys. The second test had 3 tests each consisting of four pictures when placed in a sequence depicted a simple study (i) Cat and two clean Rats (ii) The Hunter and the Deer (iii) Bay and the dog on a rainy day. The four pictures were presented in a jumbled way.

The pictorial interpretation measured understanding of cues and the sequential task demanded not only the capacity to describe and understand but the interlinkages and then construct a story. It did involve transcation of information from visual to verbal skills. Hence, a more complex task. Results indicated a developmental trend for both pictures although for the first it was rapid and reached the maximum at age 10. The sequential picture developed but was not complete by age 10. The sequential picture developed but was not complete by age 10. The main effect for school and caste were also significant. Superior schools and caste Hindu group displayed significantly higher level of performance on the two tasks in compension to those from ordinary schools and scheduled castes. Interactions were not significant.

Cross-comparisons were made at different age level on picture interpretation task.

(i) In the age group 4-5 the scores of children from superior schools irrespective of caste status were significantly higher than those of the scheduled caste group from ordinary schools.

(ii) Caste Hindu children in ordinary school scored higher than SC from the same school.

(iii) At age 7-8 and 9-10 both the groups from superior school had better scores than SC from ordinary school.

In respect of sequential perception task :

(i) Poor SC children of 4-5 years from superior schools scored significantly higher than SC in ordinary schools.

(ii) In 7-8 age groups non SC from superior and ordinary school score better of than SC from ordinary schools.

(iii) For 9-10 year old superior school children scored higher than both groups of ordinary schools.

Hence, nature of schooling seemed a potent factor to influence perceptual process particulars of SC children reading in better schools compared to their counterpart in ordinary schools.

Disadvantage due to socio-cultural status i.e., SC and poor schooling had a detrimental effect on the development of two perceptual (skills). The effect was much for the complex task. Better quality education received by children levelled off atleast same of the perceptual skills induced by socio-economic disadvantages. The discrepancy in performance in favour of non Scheduled Caste went on increasing with age, and with complex task recuiring more linguistic skill, the SC children were much behind the caste Hindu and this trend was visible in the superior schools. This may be dome to greater social discriminations and isolation experienced, by older SC children in better institutions. Besides, with increased age children become more conscious of their caste status. This feeling of social inferiority and deprivation which prevent them from taking full advantage of the facilities provided by the school. In other words, if social discrimination prevails educational facilities by themselves are not able to have the beneficial influence in developing various perceptual and cognitive skills in the school. This finding is in agreement with those of Das and Singha (1975).

Sinha (1982) believes socioeconomic and cultural disadvantages and discriminations suffered by the scheduled castes for generations and over centuries that are far more important as factors underlying lower perceptual competence than genetic, nutritional on any other factor perse. Although discriminations have been legally abolished but traditions die hard and they still suffer from many socio-economic and cultural disadvantages. Added to these also lack of interest and apathy on the part of a large majority of SC parents for educating their children. Merely providing school facilities are not enough unless the social ecology is changed, even for development of perceptual skills.

Does prolonged development affect perception?

The significance of experience in perceptual development has been documented in a variety of studies concerning sensory and perceptual isolation and deprivation. In this framework it can be visualised that people differing in deprivational level would show varying degree of perceptual deficiency or accuracy including self-perception.

Mishra (1982) conducted a study on 645 SS drawn from rural and urban settings of eastern U.P. the subjects were divided into three groups Low (N=166), Medium (N=195) and

High (N=150) deprived group on the basis of PDS. Koh's Block Design Test, Pictorial Depth perception, status perception test, self-perception Test, time perception, perceptual identification test, Portable Rod and Frame Test, Categorisation of concrete objects, pictures, Cattell's Culture Fair test of Intelligence, (CFT), verbal reasoning, verbal learning, were used as cognitive measures. The motivational measures included assessment of n-ach, affiliation, approval, and power motives were prepared anditem analysed by Misra and Tripathi (1975). The age group of subjects were 15 to 25 years. They are either worker or students. The details of procedure is given in Misra (1982).

Results revealed that on Block Design Test, the effect of deprivation on performance is clearly negative. The low deprived group had high BDT scores than MD and HD groups. Analysis of performance across age levels failed to show any significant differences. The correlation between PDS and BDT indicated a negative relationship between deprivation and intelligence.

Depth perception in pictorial representations gets poorer with increase in deprivation level. The product-moment correlation between the scores on PDS and PDS was in negative direction (r=.25, P<.01, N=446). The perceptual task involved a three dimensional task. Identification of a simple line drawing embeded in complex drawings becomes more difficult with increase in deprivation level. This finding remained valid when age and intelligence were controlled. The quality of physical environment in which HD Ss live, particularly of rural agricultural setting provides little opportunity of complex and detailed perceptual learning especially through symbolic representations of objects on pages and screens. Their physical environment lacks variety and richness required for perceptual growth, hence, the difficulty in perceiving the embedded figures. This reflects perceptual rigidity on the part of the high deprived group. Inspite of the apparent differences in the level of performance the pattern of using depth cues was strikingly similar in all groups. There is a difference in skills and not the pattern. Difference in depth perception is also due to degree of urbanization, cultural styles, ecological and experiential factors. Experiential base is thus a prerequisite to accurate perceptual skills.

An individual's status is influenced by the position he holds and is also influenced by the way in which other in the social unit perceive and value him. In course of social learning one also leaves characteristic mode of perceiving his social status which influences his perception and plans.

PDS and status perception in the study of Misra and Tripathi (1982) are inversely related. In all areas (past, present, future aspiration) mean status scores decreased with increase in deprivational level. Status evaluation showed more consesus across the three groups. Education, character, income and caste appear to be relatively more potent determinants for perceived social status. On the status improvement dimension as reported by HD, MD, and LD groups also showed consensual judgement. Education, intelligence, honesty, money and work are more valued than other qualities. Caste as requisite of status improvement is a less potent factor. The high deprived group showed unrealistic aspiration and lack of future planning.

Deprivation level creates interesting differences in time perception of 10, 30 and 60 seconds. The magnitude of over estimation in case of smallest interval increased with deprivation level. Even in case of medium time interval the HD group showed high degree of overestimation. With long interval there is no such difference. This makes it intutively clear that deprivation level affects STM but the results are not clear cut.

Each and every individual develops a picture or image of himself. This influence by social learning and a number of social factors. If an individual is devalued by others, this may lead him to accept devaluation. Devalued identity leads to negative self-image and sense of inferiority as functions of life conditions leading to socio-cultural disadvantage and cultural deprivation. Eventhough Whiteman and Deutsch (1968) reported negative relationship between cultural deprivation and self-concept, this study (Misra and Tripathi, 1962) did not support such an observation. There is no tendency of the deprived being self devaluative.

The low deprived groups clearly revealed more differentiated cognitive functioning than the high deprived group for both concrete objects and pictures. The observed deficiency in abstraction among HD group SS seems to be an inevitable outcome of deprivation as observed in verbal reasoning task.

How can we explain deprivation and its role on conceptualisation?

Ginsberg (1979) has disputed the presumed deficit in cognitive function on the basis of cross cultural data. He concluded that cognitive functioning is quite similar in a variety of cultures through out the world. Deprived and non-deprived do not differ in competence but in performance which is deceiving. Social class differences are superficial unless one goes to the roots of experience.

Misra (1982) used objects, pictures, culture fair test, verbal reasoning task to test conceptualisation. Number of categorisation or cognitive differentiation (Witkin, *et. al.* 1962) HD gave less number of categorisation. Thise reflects a restricted conceptual system of HD group in using concrete objects. HD showed fewer number of categories and therefore cognitively less complex than LD. Hence, PDS is closely related to conceptualisation.

The CFT yielded data which indicated an inverse relationship between PDS and complex conceptualisation. The HD and LD groups differed in total number of correct solutions on all the four subjects of CFT : Series, Classification, Topology, Matrices, Level of conceptualisation as manifested on CFT varied as a function of PDS. Increase in determination of verbal reasoning is seen with increase in deprivational level. In other words, verbal reasoning and PDS are negatively related even after matching age and intelligence.

Nutritional deprivation and achievement

We have been talking about cultural disadvantage and educational under achievement. But poverty may affect intellectual development through physical conditions i.e., malnourishment. Poverty is all pervasive in India and is responsible for social and educational pathology. There is a culture of poverty characterised by the legacy of psychological distortion which manifest itself in profound alienation from larger society and people, feeling in powerlessness and meaningless in struggles. When we live in a society of self advertisement and propagation, these people remain only conscious of their deprivation. Our middle class attitudes further brutalises the poor and the under privileged. Psychological poverty, intellectual and affective poverty nutional and biochemical deficiency, institutional poverty predisposena lower SES child more than any one else for educational under achievement.

Professor Birch and his associates have clearly demonstrated that malnourished children had not only stunted growth but also were found to be below normal in reading ability and auditory visual integration. Birch suggest that malnutrition might have caused a structural deficit in the central nervous system which affects later intellectual achievement demanding complex integrative mechanism but there is no conclusive evidence such a damage, Poor children are unhappy have no desire for self actualisation, they are apathotic, distracted and have low n-ach. Because of the ill effects of poverty the poor becomes impoverished in educational achievement.

Nutritional deficiencies constitute most probably the greatest single deterrant to physical health and consequently to mental development and performance in school. Deprived children mostly suffer from malnourishment in one form or another. Current research on the possible connection between malnutrition in early life and mental development was reviewed at a symposium held in Saltsjobaden, Sweden in August 2973 by the Swedish Nutrition Foundation in Conjunction with West and other bodies. The workshop felt that the complex relationship between nutrition, mental development and importance of or concomitant or interfering phenomena such as social deprivation repeated infections and expressed greater need for assessment of problem and its effects on intellectual performance.

Two studies have been completed by the author and his colleagues on assessing the effect of malnourishment on intellectual performance (Dutta & Panda, 1977) and on ascertaining the concomitant effects of physical anomalies and deficiencies on intellectual performance of low SES children (Spark and Pan 1971). The former study is based on an Indian sample and the later on an American sample but both the studies included children from lower SES strata.

In the exploratory study Spark and Panda (1971) the purpose was to investigate the correlates of cognitive performance and achievement in reading, language arithmatic, and intelligence. The study included 538-296 boys and 242 girls, 239 black and 222 White children coming from Powhatan county rural lower

SES homes and reading in 12 different grades. Measurement was done using WISC and California achievement tests alongwith detailed physical examination by medical staff.

Nearly 2/5th of rural disadvantaged children were under achievers in schools. Boys had more poor attendance in schools than girls. Boys had greater emotional problem, social problems, auditory and orthopaedic problems than girls. Negative relationships obtained between age and each of these measures : intelligence, verbal IQ, Non-verbal IQ, and reading comprehension suggested the validity of cumulative deficit notion. IQ scores are lower than the age norm. Arithmatic and reading grades of these children are one to two grades below the grades in which they have been enrolled.

Within the class, mean intelligence score and achievement scores measured by California Achievement Test were lower in Negro pupils than those in which pupils. Further, the discripancy was in the higher grades. This suggests a similar interpretation of performance difference between Brahmin/Harijan studies conducted in India and progressive retardation over age obtained in many studies.

Within the deprived community the girls appeared to be comparatively better than boys in intellectual performance. There is a curvilinear relationship between sex and arithmetic reasoning and arithmetic fundamentals across grade levels. But in reading comprehension and reading vocabulary than boys across all grade levels children girls did better having physical/orthopaedic problems did not show consistent poor performance in the cogitive tasks. The research findings permit us a general statement i.e., all groups of disadvantaged rural students are characterised by poor cognitive competence, and educational achievement. We essentially came to the same conclusion whether we analysed the results in terms of organismic variables such as : Sex, race, grade, levels or by dichotomising the Ss on the basis of some behavioural characteristics : social, emotional, physical. Differentiation on the basis of physical characteristics offered some meaningful about rural disadvantaged children especially of their educational retardation. Obviously sensory impairments and general malnutrition factors do inhibit school learning.

It has been observed that the consequence of malnutrition on intellectual performance of the low income group children.

The study (Dutta, 1978) included 360 (180 tall, 180 short) children. The Sweden Conference made it clear that stunting of the child can be considered as an index of malnutrition. All these children came from two caste groups Brahmin(High) and Harijan(Low). The Harijan sample was drawn from both rural and urban schools but the Brahmin sample was only from rural schools. A large number of children were tested with regard to their heights and a distribution of heights was done. Those whose heights fall below Q were included in the short category and all those whose heights were above Q3 were included in the tall category.

The urban Brahmin sample was not included in this study because of their consistent superior performance in the previous studies. Children who are of short height were considered malnourished and the tall group acted as its control. Each of these children were given a series of cognitive tests including classroom learning tasks, social personal adjustment, self-concept, and cognitive style tests. Parents were also interviewed on a parental expectancy questionnaire. The analysis of the data revealed the following results scores on parental expectancy questionnaire. The analysis of the data revealed the following results scores on parental expectancy of education of their children, keeping knowledge of children's progress, and making preparation for their educational attainment are consistently lower for all the four Harijan groups and short Brahmin children compared to tall Brahmin children. The scores in case of the short Brahmin children is also higher than those of Harijan groups. On parental interest about children's academic achievement however, the scores of all groups were fairly close except that of tall Brahmin group.

In school achievement, Brahmin children were better of than Harijan children. Tall Harijan children were superior to short stature Harijan children mostly in rural areas. On tests or cross modal coding and short term memory (visual) the effects of malnourishment was clear cut. Short stature children of low/high caste did poor compared to all groups of the respective categories. Brahmin children scored high compared to Harijan children. The colour naming and word reading speed did not reveal significant differences between short and tall groups but superiority of the high caste over the low caste was pronounced. Consistent with previous findings short stature children had lower intelligence as measure by Raven's Coloured Progressive Matrices than the children and superiority of Brahmin children over Harijans (both urban/rural) got confirmed the data. Malnourished children identified by short stature were inferior in discrimination learning measured by matching of familiar figures and had poor self-concept scores compared to the tall groups. Caste differences were not obvious in these areas, although the Brahmin children had more number of associations to functional words than that of the Harijan children. These results although preliminary at present do indicate the differential effects of malnourishment on cognitive performance of children and parental expectations. Malnourishment affects adversely the intellectual and affective performance of children. Birth in a high caste compensates to some extent the ill effects of malnourishment.

It has been asserted that an individual's competence in cognitive funcitioning is an integrated function of the interplay between genetic endowment and his experiences. The cognitive structures are shaped and changed by information, but they in turn govern the form in which information is processed. Environmental experience are essential prerequisites for the growth of psychological functions beyond the level of reflex. Hunt (1964) believes experience as the programmer of human brain computer. Cognitive activities can be conceived as social phenomena in origin and as processes formed during the course of the mastery of general human experience (Luria, 1971).

Absence of appropriate environmental stimulation during critical periods in the organisms development can lead to later functional deficits. Malnutrition does not make a unique contribution to the cognitive performance of the children when examined at age 9 or 10. Waterlow (1975) "...... What matters in practice is the total environment of the child through out the period of growth and development. It is not an episode of malnutrition in early life that leads to handicap". Das and Soysa (1982) pointed out further that early education of disadvantaged children offsets ill-effects of malnutrition and the child's intellectual performance improves with school attendance.

Caste membership is not basic determiner of cognitive competence, Tripathi and Misra (1975) compared high caste and low caste children belonging to moderate category of deprivation and did not find difference in cognitive growth. True, but in our Indian social context, caste still operates as a powerful factor in providing or restricting experiences. Experiences mediate the development of cognitive structures and acquisition, storage an retrieval capacities which are indicative of competence are enhanced through experiences. One has to look therefore, how to control and intervene the mediational process.

Highlights

Cognition basically refers to information processing sensory inputs, their transformation, storage and retrieval. Sensory deprivation influences perceptual functioning in an adverse way particularly in the development of skills. Culture provides an anchorage to perception. Caste membership at a high level sometimes off sets the ill effects of deprivation or disadvantaged. School culture is also a dominant influencing agent for perceptual variations. Prolonged Deprivation affects perception in a variety of ways: status perception, figural perception, time perception, conceptualisation. Malnutrition has adverse effect on cognitive functioning which is often imversible. There is a need therefore to augment mediational process for better cognitive processing of the Disadvantaged.

REFERENCES

Covington, M.V. (1967). Stimulus Deprivation as a function of social class membership. Child Development, 38, 2, 607.

Cravioto, J.; Gaona, C.E. and Birch, H.G. (1971). Poverty in India. Economic and Political Weekly., 6, 1971.

Das, J.P. (1973). Cultural deprivation and cognitive competence. In N.R. Ellis (ed). International review of research in mental retardation. Vol. 6, New York: Academic Press, 1-53.

Das, J.P.; Jachuck, K. and Panda, T.P. (1970). Caste, cultural deprivation and cognitive growth. In haywood, H.C. (Ed) Socio-cultural aspects of mental retardation. New York: Appleton, 587-604.

Das, J.P. and Singha, P.S. (1975). Caste, class and cognitive competence.

Das, U.C. & Panda, K.C. (1977). Effects of certain non-intellective variables on cognitive performance. Unpub. Research Report.

Das, J.P. and Soysa, P. (1982). Late effects of Malnutrition: A Biomedical and Psychological study. In Sinha, Tripathi, and Misra (1982), Ch. 7, 105-122.

Dutta, T. and Panda, K.C. (1977). Effect of Malnutrition on Cognitive Competence (unpublished research report).

Ginbserg, H. (1972). The Myth of the Deprived Child. Prentice Hall.

Gokulnathan, P.P. and Mehta, P. (1972). Achievement motive in tribal and non-tribal. Assamese secondary school adolescents, Indian Educational Review. 7(1), 67-90.

Haywood, H.C. and Tapp, J.T. (1966). Experience and the development of adaptive behaviour. In N.R. Ellis (Ed.). International Review of Research in Mental Retardation. Vol. 1. New York: Academic Press.

Hudson, W. (1967). The study of pictorial perception among unacculturated groups. International Journal of Psychology, 2, 89-107.

Hunt, J. Mc V. (1961). Intelligence and experience. Ronald Press. In Wiseman S. (Ed.). (1973). Intelligence and Ability, Penguin Books, 337-376.

Hunt, J. Mc. V. (1964). The psychological basis for using pre-school enrichment as an antidote for cultural deprivation. Merrill Palmer Quarterly, 10, 209-243.

Jensen, A.R. (1966). Cumulative deficit in compensatory education. Journal of School Psychology, 4, 37-47.

Jensen, A.R. (1971). Interaction Level I and Level II abilities with race and socio-economic status. Journal of Educational Psychology, 66, 99-111.

Lesser, G.S.; Pifer, G. and Clark, D.H. (1965). Mental Abilities of children from differ nt social class and cultural groups, Monographs of the Society for Research in Child Development, 30, 4.

Luria, A.R. (1971). Towards the problem of the historical nature of psychological process. International Journal of Psychology, pp. 259-272

Mehta, P. (1969). The achievement motive in high school boys, National Council of Educational Research and Training, New Delhi.

Misra, G. (1982). Deprivation and Cognitive Competence. In Sinha, Tripathi, and Misra (1982). Ch. 10, 151-176.

Misra, G. & Tripathi, L.B. (1978). Prolonged deprivation and motivation. Journal of Psychological Researches, 22, 171-179.

Panda, K.C. and Das, J.P. (1970). Acquisition and reversal in four subcultural groups generated by caste and class. Canadian Journal of Behavioural Sciences, 2, 267-273.

Piaget, J. (1947). The Psychology of Intelligence. London. Routeledge and Kagan Paul.

Rao, S.N. (1976). An experimental investigation of children's concepts of mass, weight and volume. Indian Journal of Psychology, 51, 212-220.

Segall, M.H.; Campbell, D.T. and Berkovitz, M.J. (1966). The influence of culture and visual perception, Indianapolis: Bobbs-Merril.

Sinha, D. (1975). Age, schooling and socio-economic factors in the development of certain perceptual skills, Unpublished report, Department of Psycholoy, Allahabad University.

Sinha, D. (1982). Towards an ecological framework of deprivation. In Sinha, Tripathi and Misra (1982). Ch. 3. 25-36. (cf. Ch. 1)

Sinha, D. and Shukla, P. (1974). Deprivation and development of skill for pictorial depth perception. Journal of Cross Cultural Psychology, 5, 434-450.

Spark, H.L. and Panda, K.C. (1971). Antecedents of cognitive competence, physical proficiency, and certain achievement related measures of a selected group of disadvantaged children in the Powhatan County school system. A research investigation, Washington DC. Health, Education and Welfare, pp. 1-233.

Tannenbaum, A.J. (1969). Some nonintellectual concomitants of Social deprivation. Israil. Annals of Psychiatry and Related Disciplines. 7, 9-30.

Tripathi, L.B. and Misra, G. (1975). Cognitive activities as a function of prolonged deprivation. Psychological studies. Vol. 20(3), 54-61.

Tripathi, L.B. and Misra, G. (1976). Some cognitive processes as functions of prolonged deprivation. Indian Journal of Psychology, Vol, 51, Part-2, 129-143.

Waterlow, J.C. (1975). Adaptation to low protein intakes. R.E. Olsen (ed.). Proteine Calorie Malnutrition. New York : Academic Press.

Whiteman, M. and Deutsch, M. (1968). Social disadvantage as related to intellectual and language development. In Deutsch, M. et. al. (Eds.). Social Class, race and psychological development. N.Y. : Holt, pp. 86-114.

Witkin, N.A.; Dyk, R.B. Faterson, H.F., Goodenough, D.R. and Karp, S.A. (1962). Psychological differentiation. N.Y.: Wiley.

4

SOCIAL DISADVANTAGE AND LANGUAGE ABILITY

Focus points

Does language spoken at home affect language of the child and this inturn determines his linguistic competence ? How far a deprived setting and under stimulation affect language competence ? Can compensatory programme and language skill training, develop the competence in the Disadvantaged ? Can language training programme be integrated at preschool and school level ? What would be the basic principle ? After a careful reading of the chapter one can get appropriate answers to these issues.

What are the language characteristics of disadvantaged?

Language is a form of communication and medium for cognitive functioning. It is acquired although a genetic basis of language has also been advocated by Lenneberg (1964). The disadvantaged child lacks verbal competence by and large due to socio-cultural deprivation and poor modelling at home.

Bernstein (1960) proposed that the differential child rearing practices result in different patterns of language. In case of middle class life is oriented around values of order, rationality and control of emotion. The parents teach that the unbridled expression of emotion, particularly hostility may create stress, damage inter-personal relations, and in general make life chaotic. The child is therefore encouraged to verbalize emotions to control them and try to understand why he feels as he does.

In Bernstein's view, middle-class child rearing depends heavily on elaborated verbal exchange. The parents use language to express goals, to discipline the child and to explain the value system. The middleclass child acquires a distinctive style of language and thought. He learns to use the elaborated code as a vehicle for thought. In Bernstein's view lower-class socialization are antithetical to expressive and elaborated code.

The lower class parents simply tell a child what he must or must not do for e.g., "shut up" or "get that" and fail to elaborate on the rationale for a prohibition or on the motivations of the participants. The restricted language in ill suited for the expression of subtle shades of meaning of thought. The child fails to comprehend relations and abstract categorisation. He lacks both long-range plans and the ability to delay gratification.

The lower class child's language code contains :

(1) Short, simple sentences which are often incomplete and syntactically weak.

(2) Simple and repetitive use of conjunctions such as "so", "than" and "because".

(3) Few subordinate clauses.

(4) Limited and repetitive use of adjectives and adverbs.

(5) Lack of reasoning in expressive language.

The restricted code orients the child towards a primitive understanding of causal relations and towards concepts which are descriptive rather than analytic. This low level of conceptual functioning inhibits the child's ability to learn from the environment. In school, his curiosity is limited and focused only on events which can be understood in a simple way.

Bereiter and Engleman (1966) accepting Bernstein's general view have attempted to develop special programmes of remedial education using drill teahnique. They found what is lacking is the use of language to explain, to describe, to instruct, to inquire, to hypothesize, to analyze, to compare, to deduce, and to test.

Bernstein (1960) in his classical tudy has explained linguistic deficiency as a function of social class membership, the poor contributing more to such deficiency.

As stated earlier Bernstein (1971) proposed that there is difference of code between speech of working class and the middle class. The working class language is characterised by restricted code where as that of the upper or middle class is elaborated. Restricted code which is a characteristic of lower class leads to lower level of conceptualisation. However, code is not an indicator of competence but of usage. He agreed later with Chomsky that linguistic competence is universal irrespective of the class or race. Linguistic performance may be affected by experimental factors. The code difference which appeared as a major influence on disadvantaged child's linguistic incompetence has turned out to be nothing other than style differences (Labov, 1970).

The linguists also believe that stylistic differences in language may be due to educational consequences but not due to social class or group. There is however, no denying the fact that language is a factor in educational problems of the lower class. This is because of the differences between the home language, dialect and the school language style. The middle class language is used in school and the children have to learn this language.

Is compensatory education for language training appropriate?

Bernstein (1971) has himself accepted that working class speech through schooling should not be eliminated. The compensatory education is bound to fail not only because it is based on an unfounded psychological theory of linguistic deprivation but also because it is based on the refusal of a universally accepted educational principle. The principle is that education should build from resources, the children possesses. The compensatory education should repair the school and not repair the child as has been done. It only reflects self-fulfilling prophacy, all of which contribute to learning failure.

Annamalai (1982) stated that from the language of the home to the language of the school, "Thecrucial point is that transition must be allowed to take place naturally and without sudden interruption in the medium of the dialect of the lower class children by the fradulant alternative use of the standard dialect. The solution, thus, for the educational problems of the children who speak at home a non-school variety is bidirectional education, as it is bilingual education for the children whose home language i.e., the language of the early childhood experience is different for the school language" (p. 136).

With regard to verbal behaviour deprivation has been found tc have significant effects on vocabulary. On other measures such as sentence complexity or rate of development of grammar do not show social class difference. It has been found that language development of socially disadvantaged children is handicapped due to several detrimental familial conditions. The poor tend to over emphasise physical and motor activities ignoring intellectual ones, (Riessman, 1962). The poor and uneducated parents talk less to their children thus, offering them less opportunities to learn. The parents are uninformed. They can not answer the curiosities of children. The limited interaction results in lack of identification of the children with the parents. The children, are given little or no corrective feed back by the parents. The children, therefore do not become aware of their mistakes, The middle class language is more abstract, flexible, detailed and subtle. Developmental delay has been observed in case of deprived children.

The lower class language has limited vocabulary. The low SES children in overall sequential organisation and logical progression. It is simple, is relatively undifferentiated. It lacks modifiers and is aimed at reinforcing the social structure rather than conveying information. The inadequate parent-child interaction and the nature of language used by the parents adversely affect the language development of children from low socio-economic strats. Vocabulary and complexity of sentence forms of the socially disadvantaged children are below the norms of middle class.

The deficiency in the language development is a serious handicap in social and intellectual development of the disadvantaged child. Language training should be given an important place in the intervention programmes.

How can language skill be developed?

Development of language skills depend upon the type of stimulation and the environment to which the child is exposed. As a matter of fact, the following points contribute to language deficit of the deprived children.

(a) Inadequate opportunity for learning to listen to complex grammar.

(b) Lack of reward for verbal behaviour.

(c) Defects in auditory discrimination.

(d) Poor verbal mediation.

Therefore, to bring about any kind of improvement in the skill it is necessary that one should concentrate on the above factors.

Reading readiness

Various attempts have been made to develop the skills. One such programme is the reading readiness programme. Disadvantaged children lack the ability to derive meaning from reading. This is necessary for success in school. The university of Georgia has developed a phonetic reading programme, for the 5 year old which is preceeded by a language readiness curriculum emphasizing labeling, discrimination, generalization. The lessons plans are structured and are designed to promote verbal skills and cognitive styles in thinking. At the level of the kindergarten these readiness programme have proved to be successful in developing oral language and conceptual development. They take on the average more time than the average children. The technique is talk-talk-talk in slow speed which permits them to speak and to be heard. These programmes are quite useful.

Matrix games

Matrix games are the most effective ways of developing verbal ability and concept formation among 3,4, and 5 year old children. Since the game is played in small groups of 5 to 6 opportunity for dialogues is facilitated. Asking children to tick up various shapes, colours and place them upon highly discriminating picture generating lebeling discrimination and generalization that prepares for reading and generalisation. This kind of exercise facilitates the verbal process among pre-school children and develop among them a ware house of word associations to bring about abstract functioning.

Comprehensive services

It would be presumptuous to attempt to change the cognitive deficits of deprived children without being concerned about medical dental, nutritional, psychological and social services. No matter how stimulating a classroom might be, an economically handicapped child has physical requisites which must be satisfied before a stable cognitive gain can be expected.

The ungraded primary and individualized instruction

Deprived children have not been able to assimilate the curriculum during the specific periods of graded school system. As a group economically deprived youngsters are significantly different from the advantaged group. To expect poverty children to move through complex learning tasks at the same rate as advantaged children is recognized as mystical. The sequence of basic primary reading skills appears to be better accomplished in ungraded schools. The concern of all teachers attempting to teach reading to deprived students is the continuing diagnosis of the skills of each learner as he progress through a sequence of more and more complex behaviour. As he is programmed each production become self-reinforcing agents. The ungraded primary, in which focus is on the individual rather than his grade level, is much more effective in developing reading skills among disadvantaged children.

Structured sequence of reading skills

The important direction for developing initial reading skills in most disadvantaged youngsters is to diagnose each child's present perceptual and verbal abilities and then bring him along step by step in a behavioural sequence of sound-symbol relationship. Programmed reading is extremely important for disadvantaged learners.

Performance aids in teaching reading

The PAT on performance aids in teaching differ from commercially produced manuals. It tends toward an exhaustive specification for a prescribed population. A book form has proved to be economical and flexible. The instructional agent reads the left page while the child is encouraged to look at the right page. The benefit of the PAT materials in an early-childhood programme for economically deprived children that it enables that teachers to teach complex beginning reading skills with a limited amount of pre-training.

Programmed strategy and the creative process

In applying theory to reading, proponents of behavioural analysis and leaders of the creative approach believe that is no middle ground.

With deprived children the behavioural analysis using programmed instruction and the creative approach using inquiry method, discovery are used in early childhood' intervention project. There is no fixed strategy that is or is not relevant. In the beginning a phonic approach with tight control over stimulus and response can still present a variety of experiences. At initial phases of learning reinforcement should be given every time and the children are asked to use the problem solving skills.

Clinical diagnosis and the reading specialists

Children with serious reading disabilities can be only dealt by reading specialist who provides diagnostic aids and treatment suggestion. These cases are not dealt by the teacher but individualized instruction is given to such defective children.

Size of the classroom

The size of the classroom and the teacher-pupil ratio should be small to promote more physical, verbal and emotional contacts. The schools for the deprived must be schools without failure so that the feelings of hope, joy and security influence the learning process of the child without fear and hopelessness.

Reading materials

After 1960 various reading materials have been devised such as the basal reading series and multi-series programme. In general, the basal readers have always been a problem for the socially disadvantaged children. Since they are developed according to middle class rooms. The multiseries program is suitable because it provides for more generalisation among better readers who are highly motivated. It assists the students in reading. Since there are various series it might be the best one rather than the basal reading series.

Information system approach

In any compensatory programme it is better to follow the system analysis procedure. This procedure emphasizes the breakdown of the entire programme in terms of defined objectives and various sub-systems with inter connections so that each of the subsystem complets its activity independently of each other but all relating to the terminal objectives. In the present system information is received too late for decision making and sometimes there is no follow up. Information is mostly based upon pre-test and post- test basis. Therefore, in programs for the disadvantaged information-feedback is important so that the goals of a programme can be changed for the various target groups.

Can language training be an integral part at preschool and school level?

Besides specific strategies of teaching language to the socially disadvantaged certain general principles of teaching language at the preschool and school level are to be kept in mind.

Teaching of language

"What steps for improving language development of the preschoolers are to be followed" ? It must be remembered that a child learns from a good speech model. Adults should use clear, and concise words slowly. Parents should encourage children to have both verbal and non-verbal communication. They must ask children to talk about something. They must ask questions, as them to describe toys, picture, books, pets, and encourage them to do so. Encourage listening and attention skills. Nursery rhymes are useful in this regard. Parents should encourage children to speak to them and act out to directions. They should develop self expression. Use exact terminology and talk at the level of the children. Correct the child criticism. These suggestions have been experimented and found effective in helping the preschoolers to learn language.

Principles of language teaching

- Teach listening and speaking first, reading and writing next. Writing does not represent intonation, rhythm, stress and structures etc. and transfer from audio to visual learning is greater. Good models of speech be available for language teaching.
- Have the students memorize basic conventional sentences accurately.
- Encourage the students to use the patterns learnt in practice so that it becomes a habit.
- Teach sound system structurally by demonstration, imitation, contrasts, and encourage children to produce speech than simply comprehending it. Practice will increase fluency and flexibility.

* Keep the vocabulary load to a minimum while students are mastering sound system and grammatical patterns.

* Teach the patterns gradually in cummulative grades and steps. Language acquisition is a complex habit and it has to be acquired slowly.

  Begin with sentences (not words), teaching requests, greetings, introduce subsentences, structured words, modification structures; Add new elements to previous pattern i.e., after you teach the pattern do you understand; you can teach, what, when, where questions; follow the principles of programming.

* Avoid teaching language through translation. Psychologically the process of translation is more complex, and unnecessary because it presupposes conceptual understanding of both language.

* Teach the language as it is true of the educated native speakers of the language not in terms of what it ought to be.

* Quantity and permanence of learning are dependent on practice. Encourage the child for practising language through memorisation and pattern practice.

* Shaping and promptings are necessary for helping child to respond. Give articulatory or other hints to help the students to articulate response.

* Give immediate reward or appreciation when language learning is upto the mark.

* Teach the meaning of language as it exists in a particular culture where the language is spoken natively.

Highlights

Language of the disadvantaged children is restricted. Poor and lack of elaborated code in home accounts for this deficit. Language deficiency is a handicap which influences the intellectual activities of the children. Proper language training (i.e., reading readiness, **matrix** games, individualised instruction etc.) with integration in classroom programme develop language skills in the disadvantaged to a remarkable degree. Basic principles in language teaching are essential for teachers to know about particularly for helping the Disadvantaged.

REFERENCES

Anamalai, E. (1982). The poverty of Language: A Linguistic Appraisal. In D. Sinha; L. Tripathi, and G. Misra (Eds). (1982) Deprivation: Its psychological roots and consequences. Concept; New Delhi, Ch. 8, 123-138.

Bereiter, C. and Engleman, S. (1966). Teaching Disadvantaged Children in the Preschool. Englewood Cliffs N.J. Prentice Hall.

Bernstein, B. (1960). Language and Social Class. British Journal of Sociology, 11, 217-276.

Bernstein, B. (1971). Class, codes and Control, Vol. 1. Theoretical studies towards a sociology of language. London: Routeledge & Kagan Paul.

Labov, W. (1970). The logic on non-standard English. In Willians, F. (ed). Language and Poverty. Chicago. Markham Press, pp. 153-189.

Lenneberg, E.H. (1964). Biological perspectives of language. New York: Wiley.

Riessman, F. (1962). The culturally deprived child. New York: Harper and Row.

5

SOCIAL DISADVANTAGE, INTELLECTUAL ABILITIES AND SCHOOL LEARNING

Focus points

Do disadvantaged children differ from others in intellectual abilities? Is it because of genetic or environmental cause? Are they far behind in school learning than other class mates? Do their processing habits differ? How far research observations relevant for educational practices with the Disadvantaged?

Are disadvantaged children different from other in intellectual abilities?

Social class or socio-economic status refers to a socio- economic continuum within groups and it is well know that children's mental ability are correlated with socio-economic status of their parents. This is a world wide phenomenon and has an extensive research literature of over 70 years. Half of the correlation between SES and childrens' mental ability fall between .25 and .50 and most of them between .35 and .40. When children are grouped according to SES, the mean IQ varies over a range of 1 to 2 SD depending upon the method of status classification. The relationship between SES and IQ constitute one of the most substantial but disputed fact in Psychology.

Socio-economic status perse as an environmental variable influencing IQ differences can hardly be accepted. Intellectual differences between SES groups have hereditary, environmental and interaction component and apparently SES is not a major source of variance in intelligence. On the other hand, IQ differences due to SES are not a superficial phenomena because of the study on cumulative deficits. Studies level of I and level II abilities reflect SES differences (Jensen, 1969) i.e., differences in level II are seen between High SES and low SES children but not in level I ability.

The question of race differences in intelligence comes up when identifiable groups or subculture within the society are brought into comparison with one another groups or population. Until 1960 very little scientific research was done on the causes and types of intellectual impairment of children coming from low income homes and most of it was concerned narrowly with description of group differences and IQ. Subsquently, research studies were directed towards understanding the processes that underlie children's intellectual growth.

Studies reviewed and conducted in western countries on racial differences in intelligence have found that the White population has significantly high intelligence than the Negro. Shuey (1966) reviewed 382 studies and concluded that the Negroes were one standard deviation or 15 I.Q. points lower to the Whites. Even when socio-economic status is controlled, a difference of 11 points remained. Coleman et. al. (1966) found the same tendency in scholastic achievement. The Negros scored one standard deviation lower than Whites.

In India, Singh (1977) has compared the intelligence of socially advantaged (high income and high caste Hindu) school students with those of socially disadvantaged groups (low income low caste Hindu and trioal). The intelligence was measured Porteus Maze Test. The sample of six hundred cases was taken from Ranchi district. The socially advantaged group was found superior in intelligence as well as in scholastic achievement measured by language and arithmetic test. Even when the socially advantaged and disadvantaged groups were matched on intelligence, the advantaged group significantly remained superior in scholastic achievement.

It has been argued that the intelligence test are biased in favour of White middle class culture and therefore, unfair to the lower class. This led to the construction of culture-fair intelligence tests. However, even with culture fair tests the social class differences in intelligence continued in the same degree as on standard test.

Jensen in America and Eysenck in Britain have argued in favour of genetic explanation of racial differences in intelligence. Jensen said, "The preponderance of the evidence is in my opinion less consistent with a strictly environmental hypothesis than with a genetic hypothesis, which of course, does not exclude the influence of environment or its interaction with genetic factors" (Jensen, 1969, p. 123).

Is the difference genetic or environmental?

There are evidences which made genetic factors more important than environmental ones in determining intelligence. For example, the differences in I.Q. within Monozygotic (MZ) twin pairs are much less than those within dizygotic (DZ) twin pairs, the respective inter-pair correlations are 0.87 and 0.53. Even when the monozygotic twin pairs are reared apart they show a higher inter-pair correlation of 0.75 than that dizygotic twin pairs of siblings reared together (0.49) The median inter-correlation for I.Q. between biological parent and child (0.50) is considerably greater than that between foster parent and child (.20). Thirdly, in families which have both biological and adopted children, the biological child parent correlation is greater than the adoptive child-parent correlation. And even when the children are reared apart from their biological parents, their I.Q. at 13 still correlates significantly with that of their true mothers (Skodak and Skeels, 1942). The closeness of familial relationship has been found to be associated with I.Qs. of individuals in a predictable way, (Jensen, 1969). The strength of correlation diminishes with the increase in distance of blood relationship.

There is some evidence that the environment has differential impact on different mental abilities. Jensen (1969) has suggested that environmental deprivation does not have an equal effect on all mental abilities. Interestingly the children of low SES with measured I.Qs. of 60 to 80 generally superior to their middle class counterparts in I.Q. on tests of associative learning and digit span. However, children of low SES with average or above average I.Q. do not differ from their middle class counterparts on these associative learning tasks. Further-more, the performance of Negro children on various aspects on intelligence tests differ. For example, the Negro children perform much better on the digit span test than on vocabulary test of Stanford-Binet. There is also difference in performance from one test to another. The Negro children do worse on Raven's Progressive matrices than on the Stanford-Binet (Higgin and Sivers, 1958). Evidently different aspects of enviroment are related to the development of different mental abilities, the understanding of which remains inadequate.

Vernon (1969) has examined the relationship between intelligence and cultural environment. He has given a list of eighteen factors to explain the low performance of socially disadvantaged children on tests of intelligence and other mental faculties. He does not ignore the genetic factors including general plasticity and genes relevant to special aptitudes. But he has a long list of extrinsic, constitutional and environmental handicaps related to socio-economic conditions. The extrinsic handicaps include such factors as unfamiliarity with the test situation, lack of motivation difficulties due to particular form of items or materials, conditions of testing e.g. working at high speed, suspicion of tester, linguistic difficulties in understanding instructions or communicating responses. The constitutional handicaps include brain lamage due to pre or post-natal malnutrition, maternal stress or disease, and birth injury. As against these handicaps Vernon (1969) has identified several positive environmental factors which help the development of the individual. Some of these are :

(i) Reasonable satisfaction of biological and social needs including exercise, and curiosity.

(ii) Perceptual and kinaesthetic experience; varied stimulation, encouragement or exploration, experiment and play.

(iii) Linguistic stimulation.

(iv) Demanding but democratic family climate, emphasizing internal controls, responsibility and interest in education.

(v) Conceptual stimulation by varied environment, books, T.V., travel etc.

(vi) Absence of magical beliefs and tolerance of non-conformity in home and community.

(vii) Reinforcement by school and peer groups of linguistic stimulation and familial 'demands'.

(viii) Regular and prolonged schooling, also demanding democratic emphasising discovery rather than rote learning only.

(ix) Positive self-concept and vocational aspirations and

(x) Broad and deep cultural interests of experience in development of intelligence.

The literature on the genetic and environmental explanations is a vast one. The long-drawn, and hearted debate remains inconclusive. "Race Differences in Intelligence", the authors (Loehlin etal, 1975) have carefully examined the genetic and environmental avidences and have concluded that because of various methodological inadequacies in most studies allowing alternative explanations, it is premature to have final judgement. Evidently the interaction of nature and nurture is a complex one and involves multiplicity of variables.

Intelligence and deprivation relationship is a little controversial. Piaget (1955) believed that the intellectual level of an individual reflects both his genetic potential as well as his experiential input. Jensen (1969) argued that individual differences in I.Q. are predominantly attributable to heredity although environment can play some role. Jensen explained the SES differences on the basis of three hypothesis (a) I.Q. and basic learning ability are genotypically independent (b) I.Q. is functionally dependent on basic learning ability (c) while basic learning ability is equally in middle and low SES, primarily due to deprivation. With proper experience low SES group will become closer to that of the middle SES.

In the light of evisting evidence it seems reasonable to conclude that birth in a particular caste, class, race is not a decisive contributor towards cognitive growth. The more direct determinant of one is performance on a general mental ability test is his experiential richness which one accumulates from environment. There are a number of studies which support an environmental explanation of differences in intellective performance (Deutsch, 1965; Vernon, 1969).

It seems obvious that both genetic and environmental factors contribute to the development of intelligence. The controversy is about the relative importance of these factors, and the amount of variance each explains. In a poor country like India, where substantial population is living below the poverty line, the crucial role of the environmental factors in significant. Moreover, there is little that society can do about genetic factors. The environmental factors are more amenable to intervention by the society. The intervention with genetic factors, despite recent researches, is a distant possibility. The responsibility of the society clearly is more in relation to the environmental factors.

Socio-economic status and cognitive functioning

Socio-economic Status (SES) has been increasingly used in a variety of pshychological, sociological and socio-educational investigations. Evidences are enough to show that low SES is frequently associated with below average intellectual functioning, low level of aspiration, language deficit and social inadequacy.

Deutsch and Brown (1964) reported data which reveals that (a) Negro children at each SES level score lower than White children and (b) Negro-White IQ differences increase at each higher SES level. The Whites show more gain in IQ points at higher SES level than do the Negroes.

John and Goldstein (1964) remarked that low SES children have more trouble with action words as they have no adequate experience infitting levels to various forms of actions they have observed. Bernstein (1965) interpreted his findings as indicative of the difference in language codes used by middle and lower class perople. He suggests that lower class children use restricted language code pattern, which restricts their ability to communicate effectively with outside groups and to receive any information from them for practical use. Linguistic inefficiency is all the more related with the level of conceptualisation and linguistic precision. Deutsch (1965) reported that lower SES children demonstrate poor verbal accomplishments, particularly with respect to abstract dimensions of verbal functioning. Unlike their middle class counterparts the lower class parents use language as a means of expressing their feelings and controlling the behaviour of their children and not as a means of comparing, explaining, classifying, generalizing, and differentiating objects, events, and ideas.

Kagan (1965) has reported that reflective tendency is related to higher reading achievement, social class, and intellectual ability. Lack of reflective tendency of socially disadvantaged children is closely related to their frustrating experiences in academic pursuits. Their ability in advanced learning situations is greatly retarded.

Studies on cognitive abilities and the relation processing modes of behaviour are rather scarce compared to demographic and ecological investigations. As such conclusive evidence regarding the potentialities of disadvantaged children as compared to normal children may be delayed unless intensive researches are taken in this direction. However, studies clearly demonstrate that conditions of social disadvantage depresses cognitive processes and other learning abilities.

Das, Jachuck, and Panda (1970) raised a few fundamental questions relating to the cultural deprivation and cognitive growth. Is incompetence largely determined by the sub-culture to which a child belongs at birth? Is it stamped fortuously because of his indelible identity with a certain caste and class? Does this advantage affect the child's cognitive growth adversely?

The cultural milieu in this reference is the caste and class to which a child belongs. The children belonging to Rich Brahmin (RB), Poor Brahmin (PB), Rich Harijan (RH), and Poor Harijan (PH) were drawn from the Municipal schools of Bhubaneswar. The age group of children was 9-12 and they were given a battery of cognitive tests viz. Raven's Coloured Progressive Matrices, stroop's Test, Short-Term Menory and a Recognition Test.

The Mean RPM scores for these groups revealed a hierarchy of rich Brahmin at the top, Poor Harijan at the bottom. But the scores of rich Harijan were more than that of poor Brahmin which may be due to the fact that Harijan has compensated for his low caste status by wealth as much as the Brahmin has lost his advantage by poverty. In reading speed Brahmins excelled the Harijans regardless of economic status, whereas in colour naming speed the rich were superior to the poor. In 'short term memory' the test showed significantly poor recall scores of the Harijan sample compared to poor and rich Brahmins. The magnitude of errors in case of Harijans in recognition test was more as against Brahmins. From the results it appears that belonging to a low caste and class appeared to account for the inferior performance of a child in some cognitive task.

Panda and Das (1970) examined the relative effects of caste and class as factors influencing performance on cognitive tasks. One hundred and sixteen boys reading in grades 4 to 6 (age between 8 to 10 years) of the same schools were taken as Ss. On the basis of parental income and caste they were divided into Rich Brahmins (RB) Poor Brahmins (PB), Rich Harijans

(RH), and Poor Harijans (PH). Each of the four groups had 29 Ss with comparable mean age 9 to 9.6 years and grade. Each S was administered the Stroop's test as a measure of reading speed. Two verbal conditioning tasks: Adjective task and light press task were used for measuring learning and reversal. Analysis of the Stroop test scores indicated that high class and high socio-economic class children had a faster reading speed than their counterparts. The superiority of the high caste over the low, approaches a statistically significant level but it was consistent with the earlier finding (Das, Jachuck, and Panda, 1970). Performance in the adjective task showed a difference between the castes but not between the two economic levels. Within the high caste rich were superior to peer in learning to criterion but among the low caste it was reversed. Performance in the light press task showed the rich to be superior to the poor in trials to learn. Although no firm interpretation can be given to the inconsistency of performance in the verbal Vs. non-verbal task two tentative reasons may be presented. Superior performance by the high caste children in expectancy, wastage and stagnation figures, school examination marks were obtained.

The results revealed some interesting features of group differences which challenge the ill effects of cultural disadvantage. The tribal children did not differ from the high caste Brahmin children in intelligence; they showed high levels of aspiration than Brahmins and Scheduled Caste children. The attentional deficits of Brahmins and Scheduled Caste children are inferior to tribal children. In the Stroop test the three groups did not differ in colour naming and word reading. Greater interference was observed in the Brahmin group which is presumably due to language and second signalling system which is presumably due to language and second signalling system which is presumably due to language and second signalling system which is more developed in this group compared to the other two groups. The Brahmin children are consistently better in concept acquistion and concept comprehension compared to Scheduled Tribe and Scheduled Caste children.

The findings are encouraging except that variation in economic status has not been taken into account while planning for the study and therefore one cannot be sure about the nature of social disadvantage. Das (1973) has clarified the relationship between cultural deprivation and cognitive competence using cross-cultural data.

A battery of cognitive tests and personality tests were given to all children varying in SES, caste/race and culture (Canadian and Indian). Some assessment of parental aspiration was also included in the study. On analysis, it was revealed that Raven's Progressive Matrices score were the lowest for Canadian Indian children, the hign SES White topped the list and the low SES White secured the second position. Cross modal coding scores followed the RPM pattern. The White SES group were compared on Reading Achievements and Mathematics. In both tests the low SES White children scored lower ($\bar{X}$=61.53, 62.23) than those of the high SES White children ($\bar{X}$=74.37, 74.43), significant beyond .01 level. Equalising the school environment failed to minimise difference in the cognitive or intellectual domain but reduced the personality differences to a considerable extent.

Molloy (1973) examined the relationship between the socioeconomic status (SES) and processing modes by giving the battery of cognitive tests to 30 low SES children and 30 high SES Children each of grade I and IV. The tests used in this study were Figure Copying, Raven's Coloured Progressive Matrices, Digit Span Forward, Visual Short Term Memory, Memory for Designs, Serial Recall, Free Recall, Cross Modal Coding, Stroop's Colour Naming and Colour Word Test. The results indicated that high SES children are superior to low SES children in almost all cognitive tasks at both the grades. Further factor analysis results revealed that three factors like simultaneous, successive, and speed were obtained in each of those groups. It was noticed that there were minor disparities in factor loading of some tests.

Sinha (1973) observed that the general performance level of children of schools were children of economically inferior homes went were significantly inferior to schools which admitted children from well-to-do and upper middle class families. It was also seen that within the same type of school, Scheduled Caste children were inferior to their caste Hindu classmates on tasks requiring simple and complex perceptual skills.

Jachuck and Mohanty (1974) reported on the effect of low SES belongingness on non-verbal reasoning and verbal ability as two forms of basic cognitive skills. 100 children were selected from high SES and low SES groups (on the basis of income) and from two age groups (8-10 years and 14-16 years). The four sub-cultural groups generated by age and SES were closely matched for school and class. Raven's Progressive Matrices and the Stroop's tests were administered. In both the age groups the high SES children performed better on each of the tests than low SES. Greater difference was noticed between the SES groups at the higher than at the lower age level suggesting the cumulative deficit hypothesis or progressive retardation with age. But the effects of class and caste remained to be confounded in this study.

Jensen (1974) investigated the interacting effects of Level-I and Level-II abilities with race and SES status on very large sample (White N=1489, Black N=1123) reading in fourth, fifth and sixth grades in 14 elementary schools and belonging to upper, middle and low SES. Level-I was assessed using Digit Span Memory and Level-II was measured by Lorge Thorndike Tests of Intelligence: verbal and non-verbal. Low SES Black children did most miserably in Level-II compared to other SES groups, thus strengthening the deprivation effect on intellectual deficits.

In the study of Das, Manos, and Kanungo (1975) the effect of SES on cognitive competence was examined by taking 30 high and 30 low SES children. The children were from Edmonton, a city where the black population is negligible. For purposes of White-Black comparison the children from Montreal schools were sampled: 30 high and 30 low SES Whites, and 20 high and 20 low SES Blacks were selected. The children were in Grade-IV. The two groups were compared on five simultaneous successive tasks. The high SES group was superior to the low SES only in Raven's Coloured Progressive Matrices, The groups did not differ in any of the remaining cognitive tasks (Figure Copying, Cross modal coding, Serial Recall, and Visual Short Term Memory). Thus, it is concluded that in school related tasks, the high SES Children were clearly at a higher level, and in simultaneous successive tasks, except in RPH, the SES groups did not differ.

The sample of children from different SES and ethnic groups were in grade IV. Only in two out of the five simultaneous and successive tasks did the groups differ. In their mean figure copying scores, the high SES White children were better than the low SES White as well as the low SES Black. Visual Short

Term Memory was the other test; the high SES White children were better than low SES Black children, but not better than the low SES White children.

In conclusion, neither SES nor ethnic differences (Black and White) seem consistently related to simultaneous successive processing.

Singh (1976) reported an empirical study on "Social Disadvantage, Intelligence and Academic Achievement" which clearly highlighted the role of caste, income, and tribal background in contributing to cognitive performance. Six hundred students in Ranchi district of Bihar were administered Porteus Maze Test to measure intelligence and language and Arithmetic Test to measure scholastic achievement. The socially advantaged group had higher intelligence in rural sample and better scholastic achievement in both rural and urban schools. Even after matching the socially advantaged and disadvantaged groups in intelligence, age, sex, and ruralurban residence, the former had significantly higher scholastic achievement.

Measures of cognitive competence show significant differences between deprived and non-deprived groups. A number of studies found that deprived children show significantly lower level of performance on pictorial depth perception, pictorial interpretation and sequential perception tasks. Misra and Shahi (1977) have found that matching of letter like forms is more difficult for more deprived children than their less deprived counterparts. Significance differences in perceptual differentiation has been reported. Children living in varying environments (i.e., urban, rural, orphanage) differ in performance on tasks involving perception of colour, form, and size. Misra (1978) has compared performance of high, medium, and low deprivation groups. The low deprived subjects displayed a higher level of competence as compared to those from high deprived groups. The performance of medium deprivation was better than highly deprived group and inferior to low deprived group. But on majority of tasks the difference between medium and low deprived groups were not significant.

Some researchers have tried to related cognitive style to deprivational variables. Ghosh and Massey (1978) have observed no effect of social class on cognitive differentiation as measured by EFT. But they did find significant effect of schooling. Misra and Tripathi (1980) studies the relationship between prolonged deprivation and performance on EFT. Comparison of high, medium, and low deprivation groups revealed some interesting results. Children of the medium groups showed more field dependence than the high deprived and low deprived groups. Alas, in low deprived group there were as many field dependent as field independent. But in MD group more than fifty percent children were field dependent. Thus, there is no clear cut pattern of relationship between deprivation and cognitive differentiation.

On the basis of review of studies published during 1965 to 1974 Chatterjee (1977) found that the relationship of SES with performance and Psychological functions showed the following trends :

Nature of Relationship	*Performance*	*Functions*
Monotonic	38%	26%
Lack of monotonicity or Unclear pattern.	31%	29%
Other	31%	45%

It is apparent that monotonic relationship between SES and performance is not very strong. There is another aspect of this issue which relates to the sensitivity to deprivational effects as a function of intellectual level of the individual. In this connection Das (1973) has proposed a "modified threshold hypothesis". According to him "if we recognize a threshold for intellectual capacity, children above this threshold are hardly affected by the usual disadvantageous conditions whereas children below this threshold are affected strongly by these conditions". It seems that there is an interaction between ability and deprivation.

The cognitive processing modes have been studied in a sample of malnourished children with reference to biomedical and psychological implications by Das and Soysa (1978). The two major coding processes namely simultaneous and successive were investigated by using Raven's Progressive. Matrices, Figure Copying, Memory For Designs for simultaneous process and Visual Short Term Memory, Digit Span, and Serial Recall for successive process. A test of intersensory integration was used using cross modal coding. The results revealed that only 16 to

50 percent of the variance in simultaneous processing is attributed to educational level of the child and ordinal position in family, whereas 15 to 45 percent of the variance in successive processing was attributed to these factors. The results therefore suggest that processing habits of information is more related to child's education, position in the family, and such other child variables rather than malnutrition. It clearly states and proves "malnutrition does not make a unique contribution to the cognitive performance of the children". At the same time it suggests that, the reasons for differential processing may be sought in the environment and family characteristics. This reasoning gives direct support for including children from different social background and age in the present study. Further, age as a determining factor along with social background is likely to have more interacting effect in terms of earlier studies of deprivation, early experience and cognitive functioning.

Molloy (1981) investigated some relationship between Age, Soci-Economic Status (SES), and Cognitive Task Performance among 120 boys from grades I and IV of Alberta Schools. Samples for each grade were divided into high and low SES groups (N=30). A battery of tasks which was administered to all the children were Raven's Progressive Matrices, Figure Copying, Memory for Designs, Cross Modal Coding, Visual Short Term Memory (Digits and Objects) Colour Naming, Colour Reading, Serial Recall, Free Recall, Digit Span (Forward and Backward), and Feabody Picture Vocabulary Test. All common variables for the two Age and SES levels were analysed separately by two-way analysis of variance. The result indicated that low SES children were more handicapped in some tasks of so called reasoning ability when compared to middle SES children. But contrary to expectations, the test scores of the contrasted SES groups were more disparate in grade I and in grade IV. For the older age group, SES differences on the culturally loaded Peabody Picture Vocabulary Test were apparent, whereas differences on the culturally reduced Raven's Coloured Progressive Matrices were statistically non-significant. This finding concurs with Vernon's (1973) finding who compared samples of high and low SES Albertan children (N=198) on a battery of tasks including Raven's Progressive Matrices and found no class differences on this measure.

Pappachan (1983) conducted a study to compare the intelligence scores of pupils belonging to different levels of socioeconomic status (average age, fourteen years). A sample of 190 ninth grade pupils of both urban and rural areas of Kerala were used for the study. The pupils were divided into High Socio Economic Status (HSES), Average Socio Economic Status (ASES) and Low Socio Economic Status (LSES) groups on the basis of the total weightage given to income, occupation and education of their parents. The difference was significant in case of HSES and LSES, and HSES and ASES groups. In the case of LSES and ASES groups the difference was not significant.

In recent years, research questions have become specific. Traditional nativism assumed the existence of fixed structure whereas empiricism looks at the problem in terms of the adaptation of the perceptual system to changes in proximal stimulus information produced during the course of growth. It therefore, seems relevant to include the social background as a independent potent variable.

The classical theorists of mental abilities failed to clarify the structure of cognitive abilities and the underlying processes adequately. In recent years, there seems to be a distinct shift towards an enquiry into processes. Das, Kirby, and Jarman (1979) have experimentally demonstrated the existence of bipolar process in cognitive functioning. This comprehensive study has examined the cross-cultural variations in two basic processes i.e., simultaneous and successive and has highlighted the possibility of further research on these processes in relation to cultural and developmental variations.

Das (1988) identified and compared the structure of cognitive abilities among normal and tribal children at two different age levels i.e., under 7 and above 10 years. In order to have better comparison, the normal children were divided into two groups namely High SES and Low SES. Hence, there were in all, three groups of children. The design of the study consisted of 2(Age) X 3 (Social groups) factorial design.

One hundred fifty boys were selected from class I and V equally drawn from normal and tribal schools of Puri and Keonjhar districts of Orissa State. 25 High SES and 25 Low SES children under each age group served as the subjects of the present study. 25 boys each of class I and V were selected from three tribal schools of Keonjhar district which formed the tribal group.

The following tests to all children in small groups and individually depending upon the nature of the test

(a) Figure Copying Test (FCT).

(b) Hidden Patterns Test (HPT).

(c) Raven's Coloured Progressive Matrices (RPM).

(d) Visual Short-Term Memory (VSTM).

(e) Digit Span Forward and Backward (DSF, DSB).

(f) Memory-For-Designs (MFD).

(g) Children's Embedded Figured Test (MEFT).

(h) Matching Familiar Figure Test (MFFT).

(i) Colour Naming and Colour Word Test (C, CW).

(j) Culture Fair Intelligence Test (CFIT).

Results revealed that children above 10 years are superior to children under 7 years in analytical ability as measured by FCT. Children coming from high socio-economic background are significantly superior to low SES normal and tribal children. The order of performance follows a sequence i.e., from high SES normal to tribal through low SES normal. Further, the performance of low SES normal children is very close to tribal children at both the age levels. The analytical ability assessed by using HPT and CEFT revealed consistent results with that of FCT establishing the fact that analytical ability is associated with development and social background.

Intelligence level was examined by using RPM, CFIT. The results of these tests indicated that younger children are less intelligent than that of older ones. High SES normal children are more intelligent than low SES normal and tribal children. Further, the low SES normal and tribal children do not differ significantly in their intellectual level at both age levels. VSTM was used to find out the immediate memory abilities of children. It was found that high SES normal children performed much better than low SES normal and tribal children in both the measures at both age levels. But the differential performance in respect of correct entries was not pronounced among the three sub-groups of children above 10 years of age. The span of attention of children was also measured by using DSF and DSB. The findings of DSF and DSB are quite similar to that of VSTM indicating thereby that, the span of attention and memory of low SES normal and tribal children are very hort compared to that of high SES normal children. The perceptual ability involving immediate memory was assessed by MFD. The magnitude of errors in case of younger children is more compared to older ones. The high SES normal children committed less errors compared to low SES normal and tribal children at both age levels. But an exception was noticed here. The low SES normal children above 10 years committed more errors compared to tribal children. However, with regard to memory abilities, tribal children are similar to low SES normal children.

MFFT was used to assess the impulsive and reflective nature of children. These abilities are usually considered important dimension of cognitive style. Age analysis revealed that older children performed well than younger children in response latency and errors. The response latency of high SES normal is less than low SES and tribal children. It is interesting to note that the magnitude of errors in case of low SES normal children is more than that of tribal children at both age levels. There was no difference between high SES normal and tribal children above 10 years of age although intergroup difference were significant between low SES normal and tribal children at both age levels.

The general perceptual speed and interference effect in cognitive processing were respectively measured by stroop Colour Naming and Colour Word Test. The findings clearly indicate that younger children took more time and committed more errors than that of older children. Similarly, the tribal children took more time and committed more errors than low SES normal children who were inferior to high SES normal children in these tests. These findings clearly indicate that low SES normal and tribal children are poor in perceptual ability and have more interference effect than the high normal children.

Moreover, the gap that has been existing between the advantaged and disadvantaged groups of children due to socio-economic and cultural differences has not been narrowed down inspite of deliberate efforts made in the direction of preparation of curriculum and text books. The learning materials presented in the text books lack clear structure. It requires that the learner himself provide organization as an aid to learning. When the material to be learned is presented in an organized form, structuring is not particularly called for and non-analytic and analytic children are not likely to differ in their learning. Therefore, the text book writers should identify the processes and organise the contents accordingly. Since the text books reflect the objectives of curriculum and maintain the standard of instruction their materials should be developed and organized qualitatively for independent thinking and problem solving processes.

School learning: Is it a reflection of social disadvantage?

Studies have shown a negative relationship between social disadvantage and academic achievement. The poor academic performance of the socially disadvantaged children is the total result of a large number of handicapping factors in their personality, families, schools and society.

Coleman et al. (1966) examined the problem of Equality of Educational Opportunity in their study with a large sample of 6,25,000 American school children. They found that the minority students, such as Negro, Peurto Rican, Mexican, American etc. scored significantly below White students at every level. The gap between the White and the Black Children progressively increased with age, indicating the cumulative deficit in achievement. DeCecco (1968) has described the socially disadvantaged child as one whose pre-school environment has failed to develop the entering behaviour necessary for beginning his formal education in the public school.

Kagan (1965) has explained low reading ability in children of socio-economic status by their tendency of impulsive as opposed to reflective thinking. In reflective thinking one considers alternative problem solutions and delays response with a view of getting a right answer. The impulsive thinking consists of quick and unconsidered responses. The lower class children, White as well as Black perform better in an atmosphere of approval, presumably because of their deep-seated feeling of insecurity which gets further threatened by disapproval. Rosenthal and Jacobson (1968) have related the low academic achievement of socially disadvantaged children with the expectation of their teacher about them. Terrel et al. (1959) found that the disadvantaged children prefer to work under concrete rewards rather than abstract ones, which hinder intellectual learning. Zigler and Delabry (1962) and Zigler and Kanzer (1962) have also pointed out the difference in the effectiveness of different kinds of rewards in children of low and high socio-economic groups. The tangible rewards, such as a prize, is more effective than intangible reward, such as verbal praise in lower class-children. They have argued that the early learning depends on primary need gratification. But latter learning depends on social reinforcements such as praise, attention, affection etc. and upon self-evaluation of one's knowledge and performance. The lower class children do not develop from the first stage of the tangible to the second stage of the social. The academic superiority of the upper class over the lower class has been found in several studies. Some studies have found that social class effect academic achievement independent of social class (Whiteman and Deutsch, 1968).

Bennur and Abraham (1973) studies 522 school students in Andhra Pradesh and found that high academic achievement was associated with high socio-economic status. Gokulnathan (1970) found a positive correlation between social class and academic achievement in a sample of 103 post-graduate students in Gauhati. Mathur and Hundal (1972) found a positive correlation between socio-economic status and academic achievement even after partialling out the effect of intelligence. Singh (1977) compared scholastic achievement of socially advantaged (high income high caste Hindu) school students with socially disadvantaged (low income low caste Hindu and tribal) students after twin-matching them on intellingence and found that the socially advantaged group was significantly superior in scholastic achievement than the socially disadvantaged groups. Sharma (1972) found the academic achievement of scheduled caste and backward class school students significantly lower than those upper castes. There is enough evidence about the negative relationship between social disadvantage and academic achievements both in India and in other countries.

Attempts have also been made to examine the social class variables such as income, occupation, physical condition in home which are essentially nonpsychological. Certain deficiencies in academic motivation of the minority group children are glaringly obvious to any one who observes the fourth or fifth grade classes in Ghetto schools. Child's social background mediate his intellectual and school performance (Deutsch, Katz, and Jensen, 1968). One might begin with race or social milieu and academic competence. The intervening processes are also not specified in most studies. The studies of Whiteman and Deutsch (1968) demonstrate that family background is related to cognitive and learning skills and it influences on the performance of the child in the school situation.

In Indian culture socio-economic status is confounded because of the Joint presence of caste and economic status. It is very often the case that high caste does not go always with the high economic status. On the other hand, low caste is invariably associated with low income. In case of the high caste, values and expectations are so tradition bound and transmitted from generation to generation that membership in a high caste predisposes one for higher academic pursuits. Poverty which is common in high caste, does not obstruct intellectual achievement to a great extent. In other word, high caste has its cultural and value influences upon the children. On the other hand the lower class child suffers both from economic necessity and cultural benefits. Within these two extremes one finds in Indian society another sub-cultural group consisting of labourers, petty businessmen with very little orientation to education. It is as if true that they want to transmit their profession to their children. In earlier investigations using classificatory grouping, Panda and Das (1970) and Das (1973) have reported strong evidence of the role of caste as an influenceing variable, but such studies are incidental and restricted in the sense that the range of learning activities used is not only limited but less relevant to class room learning. Further, developmental variations are not taken into accunt. Dugan (1962) has amply demonstrated the relationship between scholastic tradition in home and cognitive competence reflected in school achievement of pupils.

It seems reasonable, therefore, that the effect of social class can be independently observed if we control the economic status differences and include sample belonging to various sex and Educational levels. Such an investigation is bound to reflect independent and interacting effects of a wide range of variables on varieties of learning task having differential educational relevance.

The poor child lives in a deprived social environment which is determined to his development of intellect and personality. If social class, as reflected through caste membership has any role to play then it would be best observed when economic status is held constant and the entire continuum of caste membership is taken into account. The assumption here is that although all children come from poor home, a Brahmin child (Higher) may be superior to a Harijan child (Lower) or a Khandayat (Middle) child in cognitive learning. The answer to such a question in depth and extension can be a matter of research interest which has been inadequately studied in Indian social context. A plan about such an investigation presupposes an understanding of the researches on social class differences in intellectual performances.

Das, (1988) determined the effects of certain non-intellective variables on cognitive learning among elementary school children coming from different caste groups. The study aimed at

(a) investigating the effects of social class (caste), educational level, and sex on cognitive learning,

(b) determining the relationships between attribution of intellectual achievement. responsibility, cognitive style and self-concept on cognitive learning.

360 children - 120 Brahmins (High), 120 Khandayats (Middle), and 120 Harijans (Low) were used as Ss of the present study. The samples were drawn from both sexes and from four Educational levels in the rural schools. All these children came from low income group families having a monthly income of less than 200 per month. Ss were administered the IAR questionnaire, CEFT, and the way I see myself scales, preceding to their being tested on a series of eight graded cognitive measures such as : Digit Span, Digit Symbol, Matching, Memory for design, Concept Learning, Word Recognition, Raven's Progressive Matrices and School achievement in verbal and quantitative areas including obtaining summated scores from school records, one after another with the minimum time interval.

Results revealed that Brahmin children had significantly more correct responses compared to that of Harijan children in Digit symbol type of discrimination and analytic perception task. With regard to error Brahmin children committed less number of errors than Harijan children, with intermediary performance of the Khandayats. One Digit span (Forward) once again Brahmin children had the highest correct score, Khandayat the next highest and the Harijan children, the lowest. Social class differences were observed for the Digit Span (Backward) in the predicted direction. The Harijan children committed more errors in the matching task than the Brahmin children and the Khandayat children. In a non-verbal task like memory for design errors are comparatively more in the Brahmin group than the other two caste groups. Brahmin children suffered more from acoustic interference than Harijan children and committed more errors, but Harijan children happened to commit more errors in the presence of neutral words. Results on perseverstive errors are less among Brahmin children compared to Harijan children but results of the Khandayat group are equivocal. In case of non-perseverative errors, the higher the caste, the lower is the error. With regard to achievement in verbal task high caste is associated with better performance. In quantitative ability as measured by arithmatic achievement tests, membership in a higher social class determines the superiority in performance, eventhough economic status is low. Even in overall achievement superior performance is closely linked with the social class membership of the children coming from low economic background.

Children's cognitive behaviours at different stages of development are influenced by their interaction with available environmental incentives. Environment in the form of different kinds of toys, objects, tools, clothing, parental love, and incentives, social conditions, cultural influences along with motivational and emotional experiences set the foundation stone for the infrasturucture of human cognitive processes. But on the other hand if these environmental incentives instead of stimulating, misdirect or halt human progress, these are named as "Deprivation Effect". The process of deprivation being the resultant effect of number of forces interacting contimuously over time is named as "Prolonged Deprivation".

Pandey (1983) observes that prolonged deprivation causes progressive decline in intellectual functioning, cummulative academic achievement deficit, and premature school termination or higher rate of dropout among children. Hence, any research which does not count for prolonged deprivation effect, perhaps fails in determining individual's relative position in the society.

Research studies on development of concept on Piagetian line were directed in studying development across age and grade level. Hence, concept attainment incorporating "prolonged deprivation" as variable are very limited in number. But studies exhibiting links between cognitive abilities, or problem solving behaviour or achievement in different school subjects and 'prolonged deprivation' effect are not uncommon. Since, children's attainment of concepts are not isolated from their achievement in school subjects, and level of problem solving etc. throwing a search light to these studies will not be out of place here.

Mishra and Tripathi (1980) observed acquisition of highly deprived group was slow in speed and less in amount. This effect was more prominent in case of meaningful verbal materials than nonsense syliabes both in social learning and free recall. Probably the HD group does not have a 'learning to learn', therefore incapable of learning. The lower class home does not have a climate of verbal interaction leading to verbal mediation and linguistic deficiency. This nevertheless suggest that there may be talent in the HD group when some individual cases are analysed.

Mishra (1983) has reviewed Indian studies relating to prolonged deprivation and development of individual in cognitive and affective areas. He made following conclusions.

(a) There is no global deficit among deprived children. The deprived are different rather than defficient towards better skills. Inspite of normal mental ability and high powers to profit from learning, they fail to achieve more due to their functioning at lower level and non-intellective characters.

(b) Deprivation as an intervening variable effects indirectly other traits of the individual.

(c) Disadvantage is universal and culture specific.

(d) The problem of deprivation being more complex in India requires both structural and psychological adjustment. Attempts are to be taken to bridge the gap between school and home through study of both cognitive and environmental variables.

The relationship between social cultural disadvantage and school learning is neither simple nor well understood. It is well known that there is a relationship between social experiences of children and their development even though it is known that the relationship is not of simple cause and effect type. The conditions of social economic and cultural deprivation usually produce many kind of deficits, some of which can be inferred from research studies on social class differences but there needs systematic study and approach to identify the processes that mediate such transmission.

Do these findings contribute to educational practice?

The findings clearly indicate that processing modes of normal and socially disadvantaged tribal children are not same and these two groups of children differ significantly in scholastic achievement. The performance of children must not be understood in terms of products only but processes which children use. The processes used by all types of children can not be reduced to their abilities. Because processes are irreducible to the underlying abilities; the abilities merely provide the lower boundary conditions for the processes but the latter can not be understood in terms of abilities. Therefore, one of the major cause for poor achievement of SD children is, that they have no capacity for self instruction, nor the available materials are suited to them for developing the basic knowledge, skills, and understanding of school related tasks. School achievement is a complex combination of many different things, many of which would be dependent upon both simultaneous and successive processing. Those areas of achievement which involve interpretation of spatial information (i.e., mathematics) should be more related to simultaneous processing, while any subject in which retention of essential unrelated information were required (i.e., spelling) would relate more highly to successive processing. The complex language subjects (reading, comprehension, etc.) would be dependent of both forms of processing. In view of this, the emphasis should be given to understand the underlying processes and accordingly appropriate intertention programme or remedial measures should be taken. The speed and attention concentration factors are equally important in this context.

Remedial instruction would concentrate on improvement of processes. It is quite natural that some individuals may be inadequate in a certain form of processing, or more generally in certain aspect of cognition. Identification of that weakness is necessary. Since simultaneous and successive processing are conceptualised as cognitive skills they can be improved through appropriate instruction and training, along with speed and attention concentration. Such optimism is generally not generated by cognitive constructs that are defined as capacities. Therefore, the obvious application the simultaneous and successive model should be in designing suitable remedial programme that would encourage the development of improved processing abilities.

On the whole the process view of cognitive functioning will certainly improve the organisational structure of curriculum, text books, instructional materials, and methodology of teaching, which constitute the major components of instruction. There is a room for enhancing cognitive competence through experimental manipulation and appropriate intervention programme for the weaker ones.

It seems more reasonable, therefore, to design the enrichment programmes on the basis of deprivational background rather than membership to specific caste or cultural group. Another important direction may be to focus on more utilization of existing potentials by treating individuals in terms of their distinct ability structure. This involves assessment of basic ability pattern as well as provision of opportunities for a diversity of conditions suited to individual abilities and needs. A classroom teacher, therefore, should match the style of teaching with style of processing habits in favour of successful and useful ones; present the material in away with specific instructions for most of children who are incapable of self-instruction especially when the ecology prevents such development of a habit.

Another dimension in which the findings of the present study can be used, is that development of some stories through which the chracteristics of simultaneous processing can be incorporated and induced in the minds of the children. These stories may be included as a part of the intervention programme. In fact, many of the personality characteristics and perceptual styles are amenable to change by direct manipulation as well as inducing proper mental set through instructional processes.

These implications strike at the very heart of a remedial or compensatory education programme. The studies on compensatory education programme reported various approaching to reduce the deficits and gaps. The pattern drill approach, the summer school inservice programme, the enrichment programme and early stimulation strategies have their limited applications. It seems reasonable to expect that these programmes emphasized the outcome by means of several technique but the projections made here is at a different footing. The stress is more on improvement of processing modes. The simultaneous processing habit is more beneficial and is a preferred strategy which should be nurtured from the beginning to the advantage of the disadvantaged.

Highlights

Intelligence being hereditary in nature is also differentially present among the disadvantaged. But the low IQ is not due to race or social class but due to heredity. The depriving environment normally attributed to low social class does not contribute to development of this innate ability but depresses it. There are several positive environment factors which contribute to the development of the individual (e.g., sensory experience, linguistic stimulation, positive reinforcement, prolonged schooling, self-concept etc.). Deficiencies in intellectual functioning and school learning are seen but with training in perseverance and simultaneous processing habit, reflective perception, improvements in school learning do occur with disadvantaged children. Teaching practices can and should incorporate effective processing techniques (analytic, reflective and simultaneous scanning).

REFERENCES

Benur, C.S. and Abraham, D. (1973). A study of the relationship between Socio-economic status and academic achievements of pupils of rural and urban High school. Journal of Karnataka University, 9, 33-39.

Bernstein, B. (1965). A Socio-linguistic approach to social learning. In J. Gould (ed). Penguin Survery of Social Science. Baltimore: Penguin Books, 144-166.

Chatterjee, B.B. (1977). Methodological implications ~~of~~ using the SES Scale as a control variable in disadvantage deprivation studies. Paper presented at UGC symposium, Allahabad University, Allahabad.

Coleman, J.S. etal. (1966). Equality of educational opportunity. Washington, DC, Dept. of Health, Education and Welfare. US Govt. Printing Office.

Das, J.P. (1973). Structure of cognitive abilities: Evidence for simultaneous and successive processing. Journal of Educational Psychology, 65, 103-108.

Das, J.P.; Jachuck, J. and Panda, T.P. (1970). Cultural Deprivation and cognitive growth. In H.C. Haywood (ed.). Sociocultural aspect of mental retardation. New York: Appleton Century Crofts, 587-606.

Das, J.P.; Kirby, J.R. and Jarman, R.F. (1975). Simultaneous and successive synthesis: An alternative model for cognitive abilities, Psychological Bulletin, 82, 87-103.

Das, J.P.; Manos, J. and Kanungo, R.N. (1975). Performance of Canadian Native, Black and White children on some cognitive and personality tasks. Alberta Journal of Educational Research, 21, 183-195.

Das, J.P. and Soysa, P. (1970). Effects of mealnutrition on cognitive competence. International Journal of Psychology, 13, 295-303.

Das, P. (1988). Structure of cognitive abilities among normal and tribal children. Unpublished Ph.D. dissertation, Utkal

DeCecco, J.P. (1968). The Psychology of Learning and Instruction. Prentice Hall, New York.

Deutsch, M. (1965). The role of social class in language development and cognition. American Journal of Orthopsychiatry, 35, 77-78.

Deutsch, M, and Brown, B. (1964). Social influence in Negro-White intelligence differences. Journal of Social Issues, 20, 24-35.

Dugan, R. (1962). Investigation of the Personal, Social, Educational and Economical Reasons for success and lack of success in schools as expressed by 105 Tenth Grade Biology students. Journal of Educational Research. 55, 544-553.

Ghose, E.S.K. and Massey, R.R.K. (1978). Cognitive differentiation effects of social clansand type of schooling. Unpublished Research Report. Department of Psychology, Allahabad University, Allahabad.

Gokulnathan, P.P. (1970). Social class and educational achievement in reletion to achievement motivation measured by an objective test. Indian Journal of Psychology. 45(1), 67-74.

Jachuck, K. and Mohanty, A.K. (1974). Low socio-economic status and progressive retardation in cognitive skills: A test of Cummulative Deficit Hypothesis. Indian Journal of Mental Retardation, 1, 36-45.

Jensen, A.R. (1969). How much can we boost I.Q and Scholastic achievement, Harvard Educational Review, 39, 1-123.

Jensen, A.R. (1974). Interaction of level-I and Level-II abilities with race and socio-economic status, Journal of Educational Psychology, 66, 99-111.

John, V.P. and Goldstein, L.S. (1964). The Social Context of Language Acquisition. Merril-Palmer Quarterly, 10, 265-275.

Kagan, J. (1965). Reflection impulsivity and reading abilities in primary grade children, Child Development, 36(3), 609-628.

Loehlin, J.C.; Lindzey, G. and Spuhlar, J.N. (1975). Race differences in intelligence, San Franscisco, Freeman.

Mathur, S.S. and Hundal, B.S. (1972). School achievement and intelligence in relation to some socio-economic background factors. Journal of Education and Psychology, 30(1), 42-49.

Misra, G. (1978). An experimental study of cognitive process as a function of prolonged deprivation. Unpublished Doctoral Dissertation, Gorakhpur University, Gorakhpur.

Misra, G. (1983). Deprivation and Development: a review of Indian studies. Indian Education Review, 18(1), 12-32.

Misra G. and Shahi, B.P. (1977). Prolonged deprivation and development form perception, Journal of Psychological Researches; 21, 185-191.

Misra, G. and Tripathi, L.B. (1980). Psychological consequences of prolonged deprivation. Agra: National Psychological Corporation.

Molloy, G.N. (1973). Age, Socio-economic Status and Patterns of Cognitive Ability. Unpublished Ph. D. Dissertation, University of Alberta, Edmoenton, Canada.

Molloy, G.N. (1981). Sub-cultural differences on selectedgcognitive tasks. British Journal of Educational Psychology, 51, 105-106.

Panda, K.C. (1983). Elements of Child Development, New Delhi: Kalyani Publishers.

Panda, K.C. and Das, J.P. (1970). Acquisition and Reversal in Four Subcultural groups generated by Caste and Class. Journal of Psychological Research, 2, 267-273.

Pappachan, P.O. (1983). Intelligence in relation to different level of socio-economic status. Journal of Institute of Educational Researches. 27, (3), 15-18.

Piaget, J. (1955). The Child's Construction of Reality. London: Routledge & Kegan Paul.

Rosenthal, R. and Jacobson, L. (1968a). Pygmalion In the Classroom. Holt, Rinehart & Winston.

Sharma, S. (1972). Sex and Caste Affiliation as Sources of Variation in School Achievement of Adolescents. New Trends in Education, 3(2), 28-32.

Shuey, A.M. (1966). The testing of Negro intelligence, Social Science Press.

Singh, A.K. (1976). Social disadvantaged, Intelligence and educational achievement, Paper read at 14th Annual Conference of Applied Psychology held at Kharagpur, December.

Singh, A.K. (1977). Social disadvantage, intelligence and scholastic achivement. Report of the NCERT, Project, Department of Psychology, Ranchi University, Mimeo.

Sinha, D. (1973). Age Schooling and Socio-economic Factors in Development of Certain Perceptual Skills. (Mimeographed).

Terrel, G. Jr.; Durkin, K. and Wiesley, M. (1959). Social Class and the nature of the incentive in discrimination learning, Journal of Abonormal and Social Psychology, 59, 270-272.

Vernon, P.E. (1969). Intelligence and Cultural Environment. London: Methuen.

Vernon, P.E. (1973). Patterns of cognitive abilities. Paper presented at the 53rd Annual conference of the Western Psychological Associations. Anaheim, California.

Whiteman, M. and Deutsch, M. (1968). Social disadvantage as related to intellectual and language development. In Deutsch, M. et al. (Eds.). Social class, race, and psychological development. N.Y. : Holt, pp. 86-114.

Zigler, E. and Delabry, J. (1962). Concept Switching in Middle Class, Lower Class and Retarded Children. Journal of Abnormal and Social Psychology. 65, 267-273.

Zigler, E. and Kanzer, P. (1962). The effectiveness of two classes of verbal reinforcers on the performance of middle and lower class children. Journal of Personality. 30, 157-163.

6

SOCIAL DISADVANTAGE AND MOTIVATION

Focus points

Motivation is the mainspring behind all activity. Do these disadvantaged children have a will to do? Do they have a high need for achievement? Do they aspire for more ? To what extent they can delay their gratification? Can disadvantaged environment explain their motivational characteristics ? The research cited in this chapter will reflect on the motivational characteristics of the disadvantaged.

Motivational characteristics of the disadvantaged

The concept of achivement motivation can be operationally defined as a need or motive to excel in a wide variety of situations. When the motive is aroused, it is expressed in driving energy directed toward attending excellence, getting ahead, improving on previous work, doing things better, faster, more efficiently, and finding solutions to difficult problems which require ingenuity and persistence. People with high n-Ach generaly are self-confident individuals who function best in situations where they assume personal responsibility and control what happens to them. They set challenging, but realistic goals demanding maximum effort; they are not satisfied with automatic success that comes from easy goals, nor do they try to do the impossibe. The take pride in their accompishments and derive pleasure in striving for the challenging goals which they set for themselves.

One of the characteristics of achievement motivation is the relative dominance of a success oriented versus a failure oriented evaluative disposition. Depending on the weight given the two alternatives of success and failue, the evaluative disposition retains a characteristic centre of gravity which is expressed in anticipation as well as judgement of outcome. Thus, success motivated persons, when setting a goal, consider the probability of success rather than that of failure; they judge their level of achievement against a general background coloured with success expectation and correspondingly the reverse is true for failure motivated persons (Heckhausen, 1987). In these cases the evaluative dispositions do not operate directly as directional tendencies but indirectly as frames of reference which are not the result of immediate experience but which influence the outsome of goal setting or judgement.

Highly motivated persons (n-Ach) attach more importance to excellence than to prestige while the reverse is true with those of low motivation. Thus achievement motivation is directed towards certain end results that are produced by one's own ability; namely to achieve success and to avoid failure. Achievement motivation, therefore, is markedly goal-directed.

The basic psychological problems of n-Ach are: (a) the dynamics of n-Ach, i.e., the nature of the influence of personality and environmental challenge on the strength of motivation and the consequent effects on behaviour; (b) the refinement of diagnostic tests of n-Ach; and (c) the development of individual differences in achievement motive. Of more general interest is the analysis of social origins and social consequences of achievement motivation.

Thus, achievement motive has been conceptualised as individual's orientation to endeavour for conduction of activities. In those situations where the performance has to be calculated. A motive force functions in the form of a relative stable characteristic of perfonality, after the period of early socialization during which it develop.

Researches in the area of achievement motivation have amply demonstrated that this motive plays a crucial role in individual and group behaviours in a wide variety of situations. It has been found that persons scoring low in n-Ach, lack confidence in themselves and are more anxious about failure than they are interested about success. Weiner and Kukla

(1970) have suggested that high n-Ach persons are attracted to medium risk, because they want to know regarding their abilities. On the other hand, persons scoring high in n-Ach, prefer task which provide information regarding their environment.

In fact, n-Ach relates to accomplishment, mastering, manipulating and organizing the physical and social environment; evercoming obstacles and maintaining high standards of work, competing through striving to excel one's previous performance, as well as revelling and surprising other; and the like. Individuals high in n-Ach are more likely to approach achievement related activities than those low in this motivational disposition, because they tend to ascribed success to themselves and hence experience greater reward for goal attainment. It has also been observed that persons high in n-Ach persist longer, given failure, than those low in this motivational tendency because they are more likely to ascribe the failure to lack of efforts and less likely to attribute failure to a deficiency in ability. Also, individuals high in n-Ach choose tasks of intermediate difficulty with greater frequency than individuals low in n-Ach because performance at those task is likely to yield information about one's capabilities than selection of tasks which are very easy or extremely difficult. Thus, n-Ach assumes a decisive status in organization of human motivation.

It is obvious that the achievement motivation is a characteristic which is to be considered as an integral part of an individual's personality make up. Now some important questions can be posed: How does n-Ach originate and how does it develop? What are the factors that accelerate or retard its origin and growth among children? These questions have been subjected to a fair amount of speculation and research, though we do not have all the answer as yet.

McClelland (1961) has made a large scale tudy of the growth pattern of achievement motive across a large number of countries and cultures. He found that the degree of environmental challenge can be considered as an essential factor for growth of achievement motive. Winterbottom (1958) has found that early parental demands for mastery and independence are positively related to the development of high n-Ach.

In contemporary psychology, motivation is used to account for origin, direction, vigour and persistence of a given behaviour.

It includes expectancies about various forms of activities based on previous history of success and failure. Deprivation is a condition which affects in influencing the motivational pattern of the socially disadvantaged.

Motivational characteristics of socially disadvantaged have been studied from various angles: effectance motivation, intention to learn, intrinsic motivation. Studies of Mc Clelland (1961) have influenced much greater thinking in understanding motivation among the socially disadvantaged children.

More specifically, the socially disadvantaged children are characterised by low need for achievement and aspirations. They are pessimistic, and indifferent of their future. Atkinson (1964) has argued that the need for achievement is influenced by a capacity for taking pride in accomplishment, and this is socially learnt. Unfortunately, the socially disadvantaged children do not learn this capacity and are unable to judge its performance by internalising a mechanism for self-discouragement. They are socialized to "self-imposed failure". Further, low need for achievement was related to perceptions of low parental acceptance and high parental punitiveness. Greenberg et al. (1965) found the students of low socio-economic status less sensitive to either success or failure in school compared to the students of middle socio-economic status. The former lack persistence in their school work. Maslow (1954) believed that needs not only develop in a sequential manner but one of the basic conditions, for the psychological and higher order needs is the satisfaction of lower order biological needs. In case of the socially disadvantaged, needs are generally not satisfied because of limited resources and therefore there is increased deprivation. Further, from a different point of view lack of stimulation or appropriate experience is likely to restrict the emergence and growth of these needs. These factors contribute to low motivation among the socially disadvantaged. McClelland (1961) attributed low n-Ach of disadvantaged to matricentric structure of the family and persistence of childrearing practices that had their origin in slavery. Absence of parents has also been found to be associated with low achievement.

The relationship between social class and need for achievement and aspirations have examined by various Indian scholars. Gokulnathan (1971) and Gokulanathan and Mehta

(1972) have reported higher need for achievement in tribal than non-tribal students and in girls than boys. One would have expected a lower level of need for achievement in tribal boys as they belong to the socially disadvantaged groups. But the tribal boys who had migrated from a village to some urban area and were studying in some urban school showed significantly greater need for achievement than his non-tribal counterparts, (Goulnathan and Mehta, (1972). Mehta, (1966) earlier found a curvilinear relationship between need for achievement and father's education. Significant differences were found in groups belonging to high and low education of father. Mehta and Mehta (1974) have concluded, "there seems to be a tendency in favour of a positive relationship between social and economic status and need for achievement". Muthayya (1971) has found significant positive correlation between socio-economic status and aspirations farmers. Rath (1974) has reported lower aspirations for income, education and occupation in tribal children than high caste Hindu children. He also found positive correlation between the low aspirations of the parents and their children.

Several stuoies on farmers and factory worers in Bihar found that aspiration had positive correlations with caste-status and level of education (Singh, A.K., 1977). It could be argued that poverty produces low need for achievement, and high need for dependency.

Misra and Tripathi (1978a) observed that low deprived group exhibited significantly higher level of achievement striving than medium and high deprived group of children. There is a negative relationship between PDS and n-Ach. This was substantiated in terms of strength of achievement motive and deprivation level. Strong parental attitude in favour of independence was associated with high n-Ach. Early demands and late restrictions are the characteristics of high n-Ach. Children.

Achievement motive seems to a product of social learning situations and reinforcement which children experience in this daily life. Affiliation motive depends upon experience of positive interpersonal relation with family members as well as other social agents. The pattern of socialisation and interaction with environment in deprived settings create apathy and underachievement. Prolonged deprivation would negatively correlate with affiliation need. Need for approval and power have the same faith in the framework of deprivation. In low class families these motives are not well developed nor do they get the proper environment for the growth of these motives. On the other hand, high need for dependency is one major component of the culture of poverty.

Misra and Tripathi (1980) stated that strength of motive to achieve success decreases with deprivation level. There is negative relationship between PDS and n-Ach. These findings are consistent with data obtained from different cultures and countries. Deprivational effects on N-Ach are mediated by specific experience during childhood.

In a number of studies, evidence has been accumulated from different cultures and countries to the effect that subjects coming from low socio-economic stratum of society show low level of achievement motivation.

In Indian setting, Mehta (1966) has reported a curvilinear relationship between boys achievement motivation and their father's education. It was also found that boys of fathers with high education and of fathers with low education showed higher level of achievement motivation than boys of fathers with secondary school education.

Family structure varies from country to country and a number of variables like order of birth, presence of father, etc. influence motivational development. Atkinson and Miller (1956) have obtained evidence showing that first-bron child tend to have higher n-Ach because their achievement oriented parents can set higher standards, be more affectionate, etc. with one child than with several. In samples of Indian students from Madras the correlation between n-Ach and birth order was +0.10.

Achievement motivation is the mainspring behind achievement oriented activity. A realistic achievement motivation is indeed dependent upon attributional process and how realistic the self perception is. It is also dependent upon the motive to achieve success and avoid failure and probability of success in a given task. Individuals in their strength of motive to achieve and various activities differ in the challenge they pose and the opportunity they offer for expression of this motive. Thus, both personality and environmental factors particularly social disadvantage must be considered in accounting for the strength of motivation to achieve in a particular person facing a particular challenge in a particular situation..

Consequences of cognitive deficiencies in socially disadvantaged children are complicated by their pattern of motivation and attitudes. They are apathetic, unresponsive, and lack initiative. It is difficult for them to form meaningful relationships. School often increases alienation of these children. Deviation in the socio-cultural background naturally creates a discontinuity between the conitive, perceptual and emotional development of the child and school curriculum and expectations. Research does suggest futility of emphasis on external rewards and there is a need for stressing the kindling of curiosity, one's own power over the materials, and other intrinsic motivating devices.

Do level of aspiration studies tell a different story ?

The word aspiration has different meanings for different persons. To the layman, it is only "ambition", it means the attainment of power, honour or some achievement. To a psychologist, it is not only ambition but it is something higher than this. Aspiration means a longing for what is above one, with advancement as its goal. It emphasizes the desire to improve or to raise above one's performance. The most widely accepted definition of level of aspiration is "the level of future performance in a familiar task which an individual knowing his level of past performance in that task, explicitly undertake to reach" (Frank, 1938).

The concept of level of aspiration means a longing for what is above one's achieved level, with advancement on it as its end (Chaplin, 1968). In other words, aspiration means the goal an individual sets for himself in a task, which has intense personal significance for him or in which he is ego-involved. Level of aspiration means absolute level of the goal pursued in performing a given task. The shifting of successively set goals was originally considered almost exclusively a function of varying level of performance.

Level of aspiration is influenced more by environmental factors than by personal factors. In early childhood, before the child is old enough to know what his abilities, interests and values are, his aspirations are largely shaped by his environment. As he grows older and is more aware of his abilities and interests, personal factors have a greater influence, but many of his aspirations, his values for example, are still environmental in origin.

Empirical findings (Singh and Tiwari, 1971; Shah and Bhargav, 1978; and Betancourt and Weiner, 1982) have demonstrated that feelings of success and failure are determined primarily by the attainment or non-attainment of the goal for which one is striving. A student with a very high aspiration level might be unhappy when receiving the grade of 'B', while an equally bright student with lesser aspirations would be satisfied with his grade. Perception of success and failure involve subjective, rather than objective levels of attainment. Thus feelings of success or selfesteem are a direct function of actual success and an inverse function of pretensions. Further subsequent aspiration level is in part dependent upon the prior attainment discrepancy (subjective success or failure). In most instances, the goal level increases after success and decreases following failure. However, a typical recations are sometimes observed, that is, an aspiration level is lowered after goal attainment or raised after failure.

Heckhausen's (1967) approach to level of aspiration was that the feeling of success or failure would be aroused by discrepancies between aspired and subsequent performance. Weiner et al. (1971) have always applied the concept of level of aspiration in relation to the feelings of success and failure and viewed that success and failures lead to different type of aspirations. A series of failures at a particular level may decrease the level of aspiration and continuous success may elevate it.

Level of aspiration has been shown to be influenced by individual differences in group standards and cultural factors. Different people set different level of aspirations. For example, individuals with high ability, or those classified as ambitious, tend to set higher aspiration levels. Experimentation with level of aspiration also increase our knowledge about defensive reactions to failure. Failure generally leads to more variable performance and aspirations and is more likely to result in psychological with drawal from the task. These findings have led some investigators to consider aspiration level more an index of defensiveness than of goal-striving.

The level of aspiration of a child is influenced by the person with whom he has identified himself. It also varies from age to age and may even vary from time to time, and culture to culture. In a questionnaire study, Simpson (1962) found that boys aspired for high occupations whose parents trained them to do so than the low aspires. It has been observed that most people of the western culture when face a level of aspiration situation, give an initial level of aspiration which is higher than their previous performance and they also try to keep their goal discrepancy score always positive, i.e., the aspiration being always higher than their previous performance. The cultural pressure to great extent is responsible for improving the level of aspiration of an individual as well as his performance.

The level of aspiration behaviour of an individual is influenced by his socio-economic status. Frank (1962) viewed that children from the higher socio-economic level are more realistic in their goal setting behaviour. Shah et al. (1978) study on social class and aspiration shows that lower class boys tend to restrict their level of aspiration more than the higher class boys. Shah views that whatever may be the standard for determining level of aspiratior, there was positive relationship between social class and aspiration of youths.

Muthayya (1967) viewed that parent's social standing is an important factor in the child's aspiration. He suggested that subjects of professional fathers are more realistic in setting their aspiration than the other groups. Very high and very low income groups may have same level of aspiration behaviours as they aspire just above their performance. There is a significant correlation between father's occupation and aspiration.

Level of aspiration is a crucial importance in the career development of disadvantaged youth, for there is considerable evidence that a person's level of aspiration is tied very closely to his perception of his world an especially to his perception of self, or self-concept. The person with a low level of aspiration often may verbalize a desire to achieve but will not take the intermediate steps necessary to succeed because he has doubts that he can truly succeed. This is common disadvantaged youth compared with those of middle class youth. Tiwari (1984) described this as the difference between real and ideal aspiration; the ideal is want a person would like to achieve, but the real is what he believes he will, infact, achieve.

Disadvantaged youth are likely to be conditioned to expect failure in regard to their ideal aspirations because of the negative experiences of their parents and neighbours. Pandey (1986) has concluded that higher level of aspiration develop in in an environment in which individuals are encouraged to achieve goals in dependently.

The evidence indicates that deprived groups are characterised by low level of aspiration. The deprived children internalies the projections of low aspirations of their parents. There is also negative relationship between PDS and level of Aspiration (Misra and Tripathi, 1978b).

Dependency motivation is another dimension which is related to deprivation. It is a habit to depend upon others when dependency is not necessarily called for e.g., seeking physical contact, seeking to be near, seeking attention, seeking praise and approval, resting separation. It is mentioned and explained well in the social learning theory. In the lower class home the parent child interactions tend to reinforce independence such more than dependency contrast to to the middle class child where the child is over protected and his dependency needs are more generally reinforced (Sinha, 1968).

Dependency motivation is expressed through lack of initiative avoidance, shifting of responsibility to others, exaggerating obstacles, excessive fear of failure, over-conformity and an ambivalent attitude to authority expressed in seeking favour from it and also aggressively rejecting it. However, a low need for achievement can never be compensated by a high need for co-operation in Indian society.

It has been widely recognised and established that underprevileged children or socially disadvantaged children are more interested in tangible reward they prefer immediacy of reward and cann't delay gratification. Poor children prefer tangible reward than verbal reward. Terell, Duskin and Wiesley (1959) found that among middle class children learning was better with neutral incentive and that of a lower class was better with material reward. Panda (1971) very clearly demonstrated the role of social reinforcement in improving learning among Negro retardates, who suffered from psycho-social deprivation. Sharma (1981) found concrete reward to be more effective on deprived children. The question whether there is a distinct reward system remains to be identified.

The ability to delay immediate gratification for the sake of later satisfication has contributed to reality orientation among children. Persons from low SES are more likely to view themselves as externally oriented and accordingly do not wish to delay gratification. They are more present oriented. In India, there is practically nothing in this area in relation to SES groups.

The low SES children are more immediate reward minded, impulsive and less likely to trust society and its agents for the possibility of future rewards as compared to children from higher strata. These are attributed to differential learning experiences and resulting expectancies for the low SES child in early years (Hess and Shipman, 1965). In fact, any class of behaviour must take into account the cultural system in which the individual lives and was socialised. The future is uncertain in which there is ultimate destruction of his hopes and the eventual realisation of fears, similar to a bird in hand is worth two in the bush. In India, the poor live in poverty, hopelessness and despair.

A feeling of powerlessness or helplessness was observed among the culturally deprived (Pareek, 1970). They believe more in external orientation. There is infact, a negative correlation between SES and external locus of control, Das and Panda (1977) found high caste children to be more internal and Harijan children to be more external in attribution of responsibility in failure situations, Sinha (1980, P. 207) stated "while success was externalised failure was often ascribed to oneself. Alongwith harsh self-critism and less favourable self-concept the underpriveleged had stringent and rigid standard for evaluating one's performance which was dysfunctional. He frequently displayed internalised mechanism of self-discouragement".

The studies of Strodbeck (1971) Hess and Shipman (1965) on deprived children suggest that the SD children do not possess a strong will to learn which is responsible for not only poor performance in intellectual tasks but is responsible for withdrawal from demanding situations. White and Taba are of the same opinion. This is a consequence of the fatalistic attitude the SD children develop from the very beginning of their lives that "It is not in my luck". Why should I try ? This is a negative motivation and SD is a pre-disposing condition for its nurturance.

Highlights

Disadvantaged children have a low need for achievement. They lack self-confidence, and are more anxious about failure. They set lower goals and do not prefer to take risks. Membership in poor social class accounts for this variation. When degree of deprivation is low, achievement striving is high. Achievement motive is a product of social learning and as such goal setting can be accelerated in the lives of the Disadvantaged. Level of aspiration is also influenced by group standards and cultural factors. A feeling of powerlessness dominates the life of the Disadvantaged.

REFERENCES

Atkinson, J.W. (1964). An introduction to motivation, New York: Van Nostrand.

Atkinson, J.W. and Miller. D.R. (1956). Parental experience in child training. University of Michigan.

Betancourt, H. and Welnes, B. (1982). Attributions for achievement related events, expectancy and sentiments: A study of success and failure in Chile and the United States. Journal of Cross Cultural Psychology, 13, 362-374.

Chaplin, M.D. (1966). The relationship between self-concept academic achievement and between level of aspiration and academic achievement. Dissertation Abstracts.

Das, U.C. and Panda, K.C. (1977). Effects of certain non-intellective variables on cognitive performance. Unpub. Research Report.

Frank, J.D. (1938). Level of aspiration test. In H.A. Mirray, (Ed.) Explorations in personality. New York, Oxford University, 461-471.

Gokulnathan, P.P. (1970). Social class and educational achievement in relation to achievement motivation measured by an objective test. Indian Journal of Psychology, 45(1), 67-74.

Gokulnathan, P.P. and Mehta, P. (1972). Achievement motive is tribal and non-tribal. Assamese secondary school adolescents, Indian Educational Review, 7(1), 67-90.

Greenberg, J.W.: Gerrer, J.M. and Chall, J. and Davidson, H.H. Attitudes towards achievement concepts. Journal of Educational Research, 58(2), 57.

Heckhausen, H. (1967). The Anatomy of Achievement Motivation, New York: Academic Press.

Hess, R. and Shipman, V. (1965). Early experiences and the socialization of cognitive modes in children. Child Development. 36, 869-885.

Maslow, A.H. (1954). Motivation and Personality. New York: Harper and Row.

Mc Clelland, D.C. (1961). The achieveing society, Princeton, N.J. Van Nostrand.

Mehta, P. (1966). Achievement motive in high school boys. Research Report NCERT. New Delhi.

Misra, G. and Tripathi, L.B. (1980). Psychological consequences of Prolonged deprivation. Agra: National Psychological Corporation.

Misra, G. and Tripathi, L.B. (1978a). Prolonged deprivation and motivation. Journal of Psychological Researches, 22, 171-179.

Misra, G. and Tripathi, L.B. (1978b). Prolonged Deprivation and Status Perception. Indian Journal of Social Work. 39, 113-121.

Muthayya, B.C. (1967). Certain personal data and their relations to level of aspiration. Psychology Annual. 8, 1, 29-39.

Muthayya, B.C. (1971). Farmers and their aspirations, National Institute of Community Development, Hyderabad.

Panda, K.C. (1971). Effects of Social Reinforcement, Locus of Control, and Cognitive Style on Concept. Learning among Retarded Children. APA, EPS, Series No. 12, 1-30.

Pandey, B.B. (1986). A study of relationship between adjustment, level of aspiration and achievement. Journal of the Institute of Educational Research, 10, 3, 18-20.

Pareek, U. (1970). Poverty and Motivation. Figure and Ground. In Allen, V.L. (Ed.), Psychological factors in poverty. N.Y.: Academic Press.

Rath, R.C. (1974). Teaching and learning problems of the disadvantages tribal children. Presidential Address: 12 Annual Conference of the Indian Academy of Applied Psychology, Utkal University, Dec. 28-30.

Shah, M.A. and Bhargav, M. (1978). Manual for level of aspiration. National Psychological Croporation, Agra.

Sharma, M. (1981). An experimental study on the effects of types of reward in performance of deprived and non-deprived children. M.A. Dissertation, Allhabad University.

Simpson, R.L. (1962). Parental influence., anticipating, socialization and social mobility. American Sociological Review, 27, 4.

Singh, A.K. (1977). Social disadvantage, Intelligence, and Scholastic Achievement : A report of the NCERT Project. Dept. of Psychology, Ranchi University. Mimeo.

Singh, H.M. and Tiwari, G.P. (1971). Manual of level of aspiration scale, Agra, Psychological Research Cell.

Sinha, D. (1980). Some cognitive and motivational concommitants of Poverty Social Change. 10, 3-8.

Sinha, Jai B.P. (1968). Some of the Concomitant and Background Variables of Dependence Proneness in India. Journal of General Applied Psychology. Vol. 1(1), 44-49.

Strodbeck, F.L. (1971). The Hidden curriculum in the middle class home. In D. Krumboltz ed. (1971). 'Learning and educational process", New York: Holt, Rinehart, Winston, Inc.

Terrel, G. Jr. Durkin, K. and Wiesley, M. (1959). Social Class and the nature of the incentive in discrimination learning. Journal of Abnormal and Social Psychology, 59, 270-272.

Tiwari, A.N. (1984). Achievement motivation in deprived society. National Psychological Corporation, Agra.

Weiner, B. and Kukla, A. (1970). An attitutional analysis of achievement motivation. Journal of Personality and Social Psychology. 15, 1-20.

Winterbottom, M.R. (1958). The relation of need for achievement to learning experiences in independence andimastery. In J.W. Atkinson. 453-478.

7

SOCIAL DISADVANTAGE AND PERSONALITY CHARACTERISTICS

Focus points

Do disadvantaged children have a different look? Why does it occur if at all? Do they see themselves in the right perspective? Do they cultivate a different value system? Are they anxiety prone ? Understanding of researches in this section will reveal the true picture.

What personality characteristics do disadvantaged children display?

Disadvantaged children are generally unstable. Effects of deprivation of familial care, more specifically inadequate mothering has been responsible for emotional disturbances in disadvantaged children. Children brought up in institutions or after care homes or Balashram as in our country have similar fate of not getting normal experience and such a condition has remarkable adverse effect on mental health and development of personality. In India, children who have spent their lives in arphanages (Panda, 1980; Sinha and Sukla, 1974), foster homes and other child-care centres (Langmeir and Matejeck, 1970) have been studied and a significant relationship has been observed between absence and/or deficient stimulation on general adjustment and functioning. Personality development is hampered due to socioeconomic deprivation. Deprivational conditions result in hardening of emotional feelings.

Faris and Dunham (1939) in an earlier study had suggested that lower social class is more prone to maladjustments. Dohrenwand and Dohrenwand (1965) reviewed 22 studies of mental disorders of adults and found that in 18 of them higher incidence of mental disorders was reported in low income group. Several studies have reported higher incidence of schizophrenia in low socio-economic group. Further, the parents from lower socio-economic group spend longer time in the hospital than those from higher socio-economic group.

Social disadvantage is negatively related to personality adjustment. Langmeir et al. (1970) found that a child from low SES has more than twice the chance of being psychologically impaired. Father's absence, disharmony between parents, low parental education, working mothers, and authoritatian fathers contribute the such maladjustment. Persons from lower social class show greater feeling of futility and alienation. Srole et al. (1962) found a linear relationship between the degree of poverty and psychological damage. Sewell and Heller (1956) found a positive relationship between personality adjustment and socio-economic status even when intelligence, family size, father's age, and age of the child were controlled. High socio-economic group children were better adjusted.

Mohanty (1967) found SES related with neuroticism, but not with anxiety. However, Murlidharan and Sharma (1971) found that tices have been reviewed by Caldwell (1964). She has concluded that the middle class families are more permissive than the lower class families. Several studies have reported greater authoritarianism in lower class parents, greater severity in toilet training and more punitive methods used by them. The lower class mother is more restrictive and harsh than the middle clas mother. The child is prevented from doing things, asking questions and exploring and contact with adult is discouraged. In the poor families, the mother spends more time coping with rather than shaping her child's behaviours of the child. Hess, (1970) has described the mother child interaction in the lower class family as socialization of apathy and under achievement. Zegiob and Forehand (1975) have reported that the middle class mothers, compared to working class mothers, displayed more social interchange, particularly on a verbal level.

Miller and Swanson (1960) have argued that the middle class child rearing practices characterised by psychological discipline, symbolic reward and maternal self-control foster conceptual style in children. On the other hand the child-rearing practices in lower social class, characterised by physical discipline, tangible rewards and limited maternal control foster kotoric style.

Spitz (1946) talked of these children as emotionally deprived or starved. Langmeier (1972) identified four main factors of deprivation:

(a) Lack of stimulation.

(b) Lack of cognitive structure.

(c) Lack of specific attachment.

(d) Lack of individualization.

Because of the reasons the children brought up in institutions should more of aggression, social provocation, and deprivation syndrome.

Inadequacies in behaviour are accentuated by the problems of poverty which regulate early socialization process in the impoverished environment. These children are cynical, hostile, SES influenced anxiety. They studied 196 school children in Delhi from two kinds of schools: one which charged fees and the others which did not. The poor were found to be more anxious. Rath (1974) has also reported higher incidence of psychopathic traits like neuroticism and insecurity in low caste group than in high caste ones. Shanmugam, in his several studies, has found a negative relationship between social disadvantage and personality adjustment. Shanmugam (1952) found that the fantasies of adolescent boys and girls from low socio-economic status reflected anxiety, aggression, punishment, depression.

Parental roles and SES have a specific degree of relationship. The upper class parents emphasise internalization of values of honesty, self-control, consideration and curiosity. The working class parents emphasise qualities that assure respectability such as obedience, neatness and cleanliness (Kohn, 1959). The working class mothers emphasise conformity whereas upper class mothers emphasise child's growth and development, affection and satisfaction. In middle class families compared to lower class, there is more emphasis an independence training in early childhood, higher expectations of academic achievement and greater belief in the availability of success. Hoffman et al. (1958) found greater degree of internalization of achievement striving in middle class school students than in working class.

There is greater aggressiveness in lower class children than in upper class children. There is a tendency in lower class to express hostility in overt acts of aggression, whereas in middle class the hostility is turned inward. The middle class children as compared to working class children, are more anxious and are more prone to guilt. The upper and lower class children learn to use different defense mechanisms. The middle class children repress their desires, whereas the working class children deny them. The middle class children are more orderly, conscientious and responsible than the working class children.

Studies on social class differences in child-rearing pracrebellious and are reared by parents with apathy and underachievement. Hence, they display personality difficulties. Rath (1974) showed that lower class groups were found to have higher incidence of neuroticism. They also manifested greater sense of insecurity. Personality is a reflection of social conditions. Dhapolla (1977) found difference in need exhibition and change between Brahmins and Harijans.

Hess (1970) which analysing personality differences observed that consequences of lower class life is a cluster of inefficiency, low self-esteem, passivity. They cann't adapt to frustrations. As early as 1957 when deprivation studies in India were not much in the field Shanmugam (1957) demonstrated positive relationship between low SES and abnormality, high incidence of anxiety in the deprived. Scheduled caste students have been observed to be more anxious than caste Hindu students Sharma, (1971). Misra and Tripathi (1978) reported positive relationship between PDS and state-trait anxiety.

Anxiety is an unpleasant emotion and it involves tension and discomfort and therefore has adaptive significance for the individual. Since poor economic conditions leads to frustrating experiences it is expected that PDS and anxiety will go together.

Misra and Tripathi (1980) showed PDS positively related to anxiety. Frustrations, deprivations, social isolation, family experiences, lack of affiliative relations explain the incidence of high anxiety in high deprived children. Parental anxiety partly explains children anxiety level. There is a negative relationship between PDS and need for affiliation, generated because of social apathy.

Self-concept of the disadvantaged children

Research on self-concept started since 1940. However, as early as 1890, William James incidentally discussed about the nature of self, in terms of its constituent parts, as "the sum total of what the individual considers himself to possess, including his body, his traits, characteristics, abilities, aspirations, family, work, possessions, friends and other social affiliations". James mark Baldwin gave an interactionist account of self development. Some years later, the concept of social interaction was elaborated by the sociologists. It was insisted that self reference was characteristic of all psychological activity.

Operationally, self can be characterised as a developmental formation in the psychological make-up of the individual consisting of interrelated attitudes that the individual has acquired in relation to his own body and its parts, to his own body and its parts, to his capacities, and to objects, persons, family groups, social values, goals and institutions, which define and regulate his relatedness to them in concrete situations and activities.

The 'concept of self' and 'self concept' originates from the theoretical frame work of self 'theory'. The basic assumption is that any individuals concept of self is a powerful influence in his behaviour and one can understand the person best by knowing his self-concept. Coombs and Snygg even go to the extent of positing that all human behaviour in some way stems from one basic motive: the need to maintain and enhance the perceived self.

The concept of self has not been very clearly stated until 1961 for which Wylie stated, "the theories are in many ways ambiguous, incomplete, and overlapping and no one theory has received a large amount of systematic empirical exploration", (P.3). The term self-concept which was not treated exhaustively by earlier theorist is an important construct in self theories.

Self theory holds that man's behaviour is always meaningful and that we could understand each person's behaviour if we could only perceive his phenomenon world as he does. Since this is impossible our closest approximation is to understand individuals self-concent. Self-concept is relatively fixed and stable. And the self-concept is the frame of reference through which the individual interacts with his world.

Kuppuswamy (1964) highlights the development of self-concept. "The concept is not a finished product at birth, but it is something which develops and how it develops, what its constituent attitudes are, depend upon the family in which the individual is brought up with all the social mores of the group to which the family belongs and the education and experience of each individual".

Whether the advantaged children maintain their more positive self-images when they enter the more integrated environment with advantaged children was determined by Soares and Soares (1971) by taking 313 disadvantaged and 348 advantaged Ss. Both disadvantaged and advantaged high school Ss had significantly lower self perception as indicated from the result. The hypothesis that the disadvantaged children of all ages have negative self-concept whether segregated or integrated situation is stressed or not was not supported.

It was found from another investigation of Soares and Soares (1971), that the disadvantaged subjects have significantly higher self-concept score than the advantaged subjects. In 1972, the author concluded that there was significantly more positive self-concepts for disadvantaged as against advantaged subjects. The race and SES were insignificantly related to self-concept as was found by Getsinger and his associates (1972). In general low SES subjects score higher on general self, social self peers and school academic items, while middle SES subjects scored higher on items concerning home and parents, Hence, teachers' behaviour in the class room teaching is expected to help in improving the concept of the child if the teacher encourages more divergent and evaluative thinking.

Researches on self-concept has involved a large number of devices for measuring self-concept since the self-concept by its very definition is personal. None of these has been universally applicable. In the context of social disadvantage there is a need for refineness of the measures.

Children infact, develop ethnic awareness at an early age, as early as four or five. The development of class awareness among children is influenced by the interaction of age, sex, intelligence and socio-economic status. Singh et al. (1960) reported different stages in the development of caste-awareness and caste attitudes in India. The children between 3 years to 5 years become acquainted with caste names and occupations. They become aware of hierachical gradations of the castes in the society between 5 to 7 years. Between 7 to 10 years they begin to discriminate on the basis of social ranking of the castes. The caste consciousness develops earlier in boys, rural children and upper castes than among girls, urban children and lower castes.

The negative self-image held by the socially disadvantaged child produce deep psychological tension in his personality and he becomes ambivalent. Deutsch (1960) found Negro children to be more passive, more morose, more fearful than the White children and have a negative self image. Kardiner and Ovesey (1962) on the basis of Rorschach protocols of 25 adults Negroes, concluded that they had a strong need to avoid facing the reality by denying distorting or simplifying tension producing situations. Negro boys tend to perceive the world as a hostile and threatening place while for white boys it is a friendly place (Mussen, 1953).

Davis and Havighurst (1964) found the middle class children to working class children are more orderly, conscientious and responsible. Several studies have reported that the lower social class children, compared to upper class children are more prone to violence and aggression. The middle class children tend to turn their hostility inward whereas the lower class children tend to turn their hostility inward whereas the lower class children express hostility in overt act of aggression.

The social class difference in the development of moral conscience has been explained by differences in child rearing practices use love-oriented techniques such as withdrawal of love psychological acceptance and rejection as reward and punishment of the child. The lower class parents use direct physical punishment. A strong moral conscience develops when there is a warm relationship between the parent and the child. Since these conditions are associated more frequently with the upper socio-economic class than the lower socio-economic class, numerous studies have concluded that moral or conscience development is more effective in the upper soci-economic class. In his review of literature on social class and child-rearing practices Bronfenbrenner (1958) has concluded that a combination of warm parent-child relation and withdrawal of love-teachnique, associated with middle class parents, develop a strong conscience with internal controls.

Middle class parents though in one sense more lenient in their discipline techniques, are using methods that are actually more compelling. Moreover, the compelling power of these practices rather than being reduced, is probably enhanced by the more permissive treatment accorded to middle-class children in the early years of life. The successful use of withdrawal of love as discipline technique implies the prior existence of a gratifying relationship, the more love present in the first instance, the greater the threat implied in its withdrawal (Bronfenbrener, 1958. P. 419)

Dhapolla (1977) noted inadequacies in self system, social extension of self, interpersonal attitudes among Harijans in comparison to Brahmins. But the self concept was similar to that of Brahmins. Misra and Tripathi (1980), also observed negative correlation between prolonged deprivation scores and self-perception ratings indicated that as the deprivation level decreased the self concept became more favourable.

Upadhyaya (1985) reported a study on sense of deprivation and self-concept using 770 students of class-X drawn from 19 high schools in Varanasi. Since of deprivation was measured by self-expression inventory with 30 questions developed by the author. Negative correlations was obtained between the deprivation and self-concept i.e., high deprivation showed poor self-concept, but the magnitude of 'r' is only. 27. Sense of deprivation experienced in home and school had similar fate. There is a need a to introduce developmental intervention programmes to help socially disadvantaged groups to develop better and more positive selfconcept.

Values in disadvantaged children

The values one holds also defines the nature of individual as well as a group. The question is raised what kind of values disadvantaged hold as against their normal counterparts.

Values constitute one aspect of socialisation and personality. Despite earlier works, it was not until Melvin Kohn's work appeared that a major body of data of class values was produced. Kohn's work consisted of a series of interviews and parents declaration of their children's values. Class based samples were then drawn in different cultural contents (Kohn, 1979). The results have been consistent. The high social class people showed values such as : greater self direction in children compared to lower social class, a finding which Kohn linked to variations in occupation and education.

In India culture, religion quite often exercises a potent influence on value orientations. Raychoudhury (1958) compared the Hindu and Muslim undergraduate women using Allport-Vernon-Lindzey scale of values. Hindu women have shown greater interest in social and political value and Muslim women showed more interest for religious values. Muslim women students are more conservative than Hindu women students. The reasons for such differences can be traced to the freedom and restrictions imposed upon the women at home.

Values of tribal society were investigated by Sengupta (1969) in the Midnapore district, West Bengal. The ceremonial behaviour self-control, dignity were characteristics of the Bhumija. Generosity in sharing food with others were also valued. They show more gossip, inquisitiveness and magical aggression. Cooperation and individual productivity are rare. Honesty, sincerity, and intellectual abilities are also scarce.

Intelligence, values and temperaments of girls reading in colleges was investigated by Sharma (1979). Significant differences were observed in the expressed values among girls coming from different SES levels. Effects of sex, SES and rural-urban residence on values was reported by Anantharaman (1980). 100 male and 100 female postgraduate students were selected from a college in Coimbatore and were given the Allport-Vernon-Lindzey scale of values in addition to Kuppuswamy's SES scale. The results revealed that male students have more theoretical and practical values. Women students more aesthetic values. High SES students showed more of religious values than low SES students.

These studies taken together demonstrate lack of adequate sampling procedure, specificity of objectives and rationale, use of measuring instruments which have questionable validity except the Allport et al. study of values. The analysis procedure is again confined to descriptive analysis and at best comparison. of groups or relationships without controlling extraneous variables and taking note of the interactive effects. For these reasons it seems that no acceptable generalisation can be made on the basis of these studies regarding value pattern of women on a comparative scale.

SES studies have been reported from a different perspective. Occupational values were studied by Agatti (1984) in relation to intellectual aptitude. 160 fourteen year old from upper, lower, and upper middle SES were used belonging to four intelligence levels. The results showed SES value differences and interactions of I.Q. levels with Sex and SES with regard to values development.

Parent's occupational status which infact determines the SES had a tremendous impact on values of children (Singh and Thaper, 1984). Girija and Bhadra (1986) observed value changes in three socio-economic groups of college students categorised on the basis of a SES scale. Personal and interpersonal value instruments were administered to the freshmen and again after 4 years. Results showed that scheduled caste group differed significantly from the backward class and advantageous class in practical mindedness, orderliness, goal orientation and recognition. But the differences leveled off after 4 years. However, the limitations of these studies in the context of social disadvantage measurement device have been stated earlier. The findings therefore, indicate gross trends. Need for studies in terms of EDS would rather ofter more clear perspective.

Highlights

Disadvantaged children are unstable, anxious, alienated, and emotionally starved. These behaviour discrepancies occur for various reasons (e.g., lack of stimulation, lack of cognitive structure, lack of specific attachment, and lack of individualisation). Parental roles and SES have a direct bearing on personality make up. Studies did reveal that disadvantaged children have been found to have higher and positive self-concepts.

REFERENCES

Agatli, A.P. (1984). Occupational values and intellectual aptitude. Arquives Brasileirons de Psicologia, 36, 142-151.

Ananthara̍man, R.N. (1980). The effect of sex, social class, and rural-urban locality on values. Journal of Psychological research, 24, 112-114.

Bronfenbrenner, U. (1958). Socialisation and social class through time and space. In E. Maccoby, T.M. Newconols, and E. Hartley (eds.) Readings in Social Psychology. New York: Holt, 400-425.

Caldwell, B.N. (1964). The effect of infant care. In ML Hottmanand L.W. Hottman (eds.) Review of Child Development Research, Vol. 1. New York: Russell Sage Foundation.

Davis, A. and Havighurst, R.J. (1946). Social class, and colour differences in child rearing. American Sociological Review, 11, 698-710.

Deutsch, M. (1960). Minority group and class status as related to social and personality factors in scholastic achievement. Monograph of the society for applied anthropology, 2, 1-32.

Dhapolla, T.S. (1977). A study of personality make up of Harijan students. Unpublished monograph, Kashi Vidyapith, Varanasi,

Dohrenwend, B.P. and Bohrenwend, B.S. (1965). The problem of validity in field studies of psychological disorder. International Journal of Psychiatry, 1, 585-610.

Faris, R.E.L. and Dunham, H.W. (1939). Mental disorders in urban areas, Chicago, University of Chicago Press.

Getsinger, S.H.; Kunce, J.T.; Miller, D.E. and Weinberg, S.R. (1972). Self-esteem measures and cultural disadvantagement. Journal of Consulting and Clinical Psychology, 28(1), 149.

Girija, P.R. and Bhadra, B.R. (1986). Comparative study of change in values among three Socio-economic groups of college students. Indian Journal of Applied Psychology, 23, 17-24.

Hess, R.D. (1970). The transmission of cognitive strategies in poor: The Socialization of apathy and under-achievement. In Allen, V.L. (Ed.). Psychological factors in Poverty, K.Y., Academic Press.

Hoffman, M.L.; Mitsons, S.B.; Protz, R.E. (1958). Achievement striving, social class and test anxiety. Journal of Abnormal and Social Psychology. 56, 401-403.

Kardiner, A. and Ovesey, L. (1951). The mark of oppresion, New York, Norton.

Kohn, M.L. (1977). Class and Conformity. Chicago: Chicago University Press, PP. 318.

Kupuswamy, B. (1964). An introduction to social psychology. Asia Publishing House.

Langmeir, T. and Matejak, Z. (1970). Psychological deprivation in childhood. (2nd. Ed.) Praha.

Langmeier, J. (1972). Personalities of deprived children. In Monks, F.J. eta l. (Eds.). Determinants of behavioural development. N.Y. : Academic Press, PP. 339-348.

Miller, D.R. and Swanson, G.E. (1960). Inner Conflict and Defence. New York : Holt.

Misra, G. and Tripathi, L.B. (1978). Prolonged deprivation and status perception. Indian Journal of Social Work, 39, 113-121.

Misra, G. and Tripathi, L.B. (1980). Psychological consequences of prolonged deprivation. Agra : National Psychological Corporation.

Mohanty, G.S, (1967). Parental Socio-economic status of College Students, as a variable in neuroticism, anxiety and hostility. Journal of Psychological Researches, 11, 102-105.

Murlidharan, R. and Sharma, A. (1971). Manifest anxiety in Indian Educational Review. 6, (2), 67-69.

Mussen, P.H. (1953). Differences between the T.A.T. responses of Negro and White boys. Journal of Consulting Psychology, Vol, 17, pp. 373-376.

Panda, K.C. (1980). Care of destitute children. Current issues in Education, R.C.E. Bhubaneswar, 3.

Raichoudhury, K. (1959). Allport-Vernon-study of values in Indian situation. Indian Psychological Bulletin, 4(2), 67-74.

Rath, R. (1974). From Social Isolation to Stagnation : A study of Scheduled Caste Groups, Social Action, 24, 2, 101-116.

Rath, R. and Sircar, N.C. (1960). The mental pictures of six caste Hindu groups about each other as reflected in verbal stereotypes,. Journal of Social Psychology, 51, 277-293.

Sengupta, K. (1969). Value orientations in a tribal society. Belletin of the Cultural Research Institutes. 891-2), 101-109.

Sewell, W.H. and Haller, A.O. (1956). Social Status and Personality Adjustment of the Child. Sociometry, 19, 114-125.

Shanmugam, T.E. (1952). Characteristics of adolescent girls fantasies. Journal of Madras University, 24, 30-40.

Shanmugam, T.E. (1957). Effect of low socio-economic status on emotional instability. Journal of Psychological Researches, 1, 60-67.

Sharma, S. (1971). Self-acceptance and academic achievement: a review of research, Indian Educational Review, 1971, 6(1), 118-125.

Sharma, S. (1979). Women in India: Status and Personality, New Delhi: Concept.

Singh, J.G. and Thaper, G, (1984). Impact of Parental values on children. Indian Journal of Clinical Psychology, 7, 105-109.

Singh, S.D.; Singh, K. and Singh, Y. (1960). Development of Caste Consciousness among children. Agra University. Journal of Research. 8, 109-125.

Sinha, D. and Shukla, P. (1974). Deprivation and development of skill for pictorial depth perception. Journal of Cross Cultural Psychology, 5, 434-450.

Soares, A.T. and Soares, L.M. (1971a). Expectancy, Achievement and Self-concept correlates in Disadvantaged and Advantaged Youths. APA proceedings 10, 561-62.

Soares, A.T. and Soares, L.M. (1971b). Comparative differences in the self-perception of disadvantaged and advantaged students. Journal of School Psychology, 9, 424-429.

Spitz, R.A. (1946). Hospitalism: A follow-up report. The Psychoanalytic Study of Child. Vol. 2, N.Y.: International University Press, PP. 113-117.

Srole, L.; Langner, T.S.; Michael, S.T.; Opler, S.T. and Rennie, T.A.C. (1962). Mental Health in the Metropolis, New York, Mc Graw Hill.

Upadhyaya, U. (1985). Sense of deprivation and self-concept. Trends and Thoughts in education. 2, 13-18.

Wylie, R.C. (1961). The Self Concept. Linclon, Nebraska, University of Nebraska Press.

Zegiob, L.E. and Forehand, R. (1975). Maternal interactive behaviour as a function of race, Socio-economic status, and sex of the child. Child Development. 46, 564-568.

8

SOCIAL DISADVANTAGE, COGNITIVE STYLE AND CREATIVE THINKING

Focus points

How do children approach problems? How do they look at their school, teachers, books? Does social disadvantage affect it? Do these disadvantaged children have any positives? Do they display a stable consistent response mode? Can these processes bring a change in their style of functioning? Are they creative? Can attempts to change cognitive style meet with success? Let us look at researches and know about their future.

Cognitive style: How does social disadvantage affect it?

The way of people perceive, think and organize experience has been a matter of concern for psychologists for many years. How do children approach learning problems? How do they approach general situations in the classroom in relation to teachers, peers and classroom materials? Some children stand back until they have the situation diagnosed before they make decisions, others embark rapidly on problems or enter vigorously into new tasks without hesitation. We can say that personal style variable refer to the personal ways in which individuals process new information and the approach behaviours they take in problem solving situation. They mainly include such things as individual's self concept, impulsivity-reflectivity, present-future orientation, successfailure orientation, sense of control over the environment, time orientation etc. At present, the concept of cognitive style has acquired three distinct meanings in the literature.

Kagan, Moss, and Sigel (1963) have found that children and adults differ with regard to the stimules dimensions to which they initially attend and the speed with which they classify these stimuli. Kagan, et al. (1963) view these differences in attention and speed as "cognitive style" variables. Cognitive style, according to these authors, refers to "stable individual preferences in modes of perceptual organizations and conceptual categorization of the external environment". One particular dimension of cognitive style involves the tendency to analyze or to differentiate the stimulus field rather than a tendency to preceive it on the basis of a stimulus-as-a-whole. The former conceptual style is known as "analytic" or descriptive attitude while the latter is referred to as a "relational" attitude.

A second approach to this problem is the work of Gardner and his colleagues (Gardner, Holtzman, Klein, Linton, and Spence, 1959). Working within a psychoanalytical framework, these authors emphasized the study of cognitive consistencies in individuals' modes of organizing experience. Processes hypothesized by this group include leveling-sharpening, conceptual differentiation in categorizing (equivalence range), extensiveness of scanning and tolerance for unrealistic experience.

The third meaning to "cognitive style" was given by Witkin, Dyk, Faterson, Goodenough and Karp (1962). At first the authors identified "field-dependence" as an important dimension.

In a field-dependent made of perceiving, perception is strongly dominated by the overall organization of the field, and parts of the field are experienced as "fused". In a field-independent mode of perceiving, parts of the field are experienced as discrete from organized background. There is now considerable evidence that a tendency toward one or the other ways of perceiving is a cansistent, pervasive characteristic of an individual's perception (Witkin, 1965, p. 318).

Further Witkin, et al. (1962) have operationalized the concept in terms of S's performance on a variety of perceptual cests (i.e., Embedded-Figure Test, Rod and Frame Test, Tilting Room Tilting Chair) in which persons were characterized as having one or the other type of stylistic tendency. Evidence shows that the particular stylistic tendencies are not limited to a person's perception; they manifest themselves in congruent form, in his intellectual activities as well. So persons who are field dependent do less well at solving problems which require isolationg essential elements from the context in which they are presented and using them in a different context.

To elucidate the nature and scope of this concept Witkin (1965) has stated:

"It is because these stylistic tendencies extend across both perception, where we are dealing with an immediately present stimulus configuration, and intellectual functioning where we are dealing with symbolic representations, that we refer to them as cognitive styles. The particular cognitive style we have been considering may be described as follows: At one extreme there is a consistent tendency for experience to be global and diffuse: the organization of the field as a whole dictates the manner in which its parts are experienced. At the other extreme there is a tendency for experience to be delineated and structured: parts of the filed are experienced as discrete and the field as a whole organized. To these opposite poles of the cognitive style we may apply the labels "global" and "articulated". As with the dimension of perceptual field dependence, there is no implication here that the world is peopled by two kinds of human beings. Scores for any large group on tests of this cognitive style show a continuous distribution (Witkin, 1965, p. 319)".

It thus appears that the terms "global" and "articulated" are more explanatory of the cognitive-style dimension than the concepts of filed-dependence and field-independence.

According to Witkin et al. (1962) an articulated cognitive style indicate a high level of differentiation in the cognitive areas, which increases with the growth of the child. Development of this psychological differentiation is interrelated with development in other areas of cognitive functioning. In the early years of development perceptual organization depends more on the structural characteristics of a stimulus field is more or less dominated by the overall organization of the field. As the individual child grows and increases his interactions with the world about him, he finds greater meaning and significance of the constituent parts of the field. This helps him to organize his experience better. The child may also separate the figure from the ground even when the perceptual field is not organized structurally. Such perceptual structuring or experiences indicates his capacity for articulation. The authors believe that development of an articulated experience depends not only on the perception of stimuli immediately present but also on the experience of symbolic materials.

Thus, articulation implies both analysis and structuring of experience. Individual differences along the analytic-global dimension represent differences in capacity to overcome an embedding context or to perceive parts of a field as discrete from organized background. Factor analytic studies have shown that Both perceptual and intellectual tasks having the requirements of overcoming an embeding context load on the same factor (Goodenough and Karp, 1961).

All these approaches to cognitive style have involved the assumption that such style variables are stable modes of cognitive functioning. However, Witkin's research interest is manifested in the extensive use of his cognitive-perceptual tasks with different clinical populations, and Ss from a wide variety of cultural backgrounds. The validity of Witkin's formulation has been empirically established in a large number of studies (Witkin, 1969a, 1969b) on intellectual functioning. The intent of the present treaties is to see how this analytic-global cognitive styles are a reflection of social disadvantage.

Kaul (1989) made a systematic investigation on positives of the deprived following a model of cultural relativism and difference rather the philosophy of deficit. SES was determined by fathers occupation and education. Low SES consisted of illiterate parents (who read up to VIIIth class, semi skilled/ unskilled workers), middle SES (10th class to B.A./B.Sc. with clerical jobs) and High SES (P.G. & Professional to profession/ executives). The study consisted of 100 children in each category with equal boys and girls in each reading V in 14 schools. The following tests were used to measure the characteristics : Field independence (CEFT), Visual modality preference Creativity and Culture Fair Intelligence Scale. Cooperation for maximum difference game (MDG), Dependency Test, and Mischel's Threefold Questionnaire Method were used. The findings revealed :

The low SES sample was found to be significantly more field-dependant than middle and high SES group. The low SES groups showed a preference for visual modality as against rural modality in companision to high/middle SES groups. There was no difference in creativity scores among low SES and middle and high SES groups. The low SES children are more cooperative, less competitive than the high SES group. The low SES children are more as dependant or as independent as middle and high class SES. The low SES sample did not demonstrate less ability to delay gratification as compared the middle and high SES groups. These findings have great educational significance, and wide rang implications for intervention in schools.

Differences in field independence are related to differences in socialisation experiences in the process of development (Witkin, et al., 1962). Mothers who are less confident have more field dependant chhildren. Competition and warm parent child relation leads to field independence. Long absence of fathers was found to have a link with greater field independence. Traditionalism is associated with social conformity which leads to faster field independence and several socialisation variables (Witkin, et al, 1971). Witkin and Berry (1975) also suggest in the context of cross cultural differences that urbanisation and exposure to formal education with emphasis on analytical functioning as determinants of greater field evidence. Thus quality of schooling is a factor promoting field independence.

Low SES are field dependent than High SES (Mac Eachron and Gruenfeld, 1978). Socio-economic difference determine to a fairly large extent the kind of environmental experiences a child will be exposed. The low SES child is born into a raltively much simpler environment with less variety of material stimulation. Hence, the disadvantaged child will tend to be more field dependant. Psychological differentiation in a cross-cultural perspective reveals that certain modes of stratification and socialisation are significantly related to it (Berry, 1976).

One of the issues which has attracted considerable attention of the Fsychologists interested in development has the ways in which a child's experiences with his environment are as coded and stored. Two modes visual and auditory are important and have different developmental rates. Verbal mode develops later. This related process refers to visual auditory modality preference.

The visual and auditory perceptual skills are crucial in the development of early reading skills. Kumin (1970) observed that low SES 5th grade & KG children from middle SES and low SES class have a greater number of responses when the presentation was visual than aural which he later confirmed this finding. Rohwer and Harris (1975) demonstrated this in prose learning. We don't have any such study in India, except that children in primary grades are deficient in reading (Agarwal, 1984). Poor readers have been found to have difficulty in auditory discrimination and shift in modality. They are more in social learning when it aural (Deutsch, 1967) which is more crucial to verbal learning.

Creative thinking: What is the role of social disadvantage?

Creativity and creative thinking have been often used synonymously although there is a subtle difference between two concepts. Creativity which reflects fluency, flexibility, originality and elaboration characteristies both in the process and product of thinking has been considered as an independent characteristics. But it can be subsumed under creative thinking. Creative thinking, a process through preparation, inculation, illumination and verification, where one creates a piece of literature, art, painting thinking a newer original.

Torrance (1977) has emphasized the positives of the plural cultures and lower socio-economic groups and their creative abilities. He hed mentioned 18 creative positives which occur in high degree among the minorities. Normally no one thinks of positive in SD.

These are: ability to express feelings and emotions; ability to improvise with common place materials and objects; articulateness in role playing, socio-drama, and story telling; enjoyment of and ability in creative movement, dance, dramatics; enjoyment of and ability in music, hythm; use of expressive speech; endurance in work; fluency and flexibility in figural media; enjoyment of and skills in group activities; responsiveness to the concrete; responsiveness to kinaesthesis; responsiveness to gestures, body language; Humer; richness of imagery in informal language; Originality of ideas in problem solving; problem centeredness or persistence in problem solving; emotional responsiveness; and quickness in warm up. There is hardly any study in India subscribing to this difference model.

Culture is the matrix and the context for creativity. Indeed, itr is the context for all creative behaviour. Fabun, (1969) believed "original transaction between an organism and its environment and for most human beings the environment is the culture in which they find themselves embedded (Fabun, 1969).

SES differences have been explored in number of studies but the evidences are equivocal (Kaul, 1989). In India, Raina (1968) compared high and low creatives on SES, and found positive relationship between SES and creativity. Ahmed and Joshi (1977) concluded poor quality of schooling compled with disadvantaged home background accentuates effects of socio-cultural deprivation and has a detrimental effect on nonverbal creativity. Sharma (1979) found that Brahmins are superior than Harijans on creativity measures on verbal and figural creativity. Training of creative thinking of different SES groups were tried by Moreno and Hogan (1976) for eight week long and they found that neither race nor social class affected the scores but training improved the creative thinking and problem solving test performance of children varying in racial and social backgrounds.

In schools, there is a mistaken assumption that these children do not have the potential to learn. So there is no sense in burdening them. This is nothing but an apprehension of urban culture which can be dispensed with systematic teacher intervention for faising creativity. As a matter of fact disadvantaged children do well in figural creativity measures and there is a need further to tap this potential.

Social disadvantage is quite interestingly related to creative thinking and its development. There was growing realization among educators that disadvantaged children from low income, ethnic and racial minority groups represent a substantial untapped source of talent. Prior to the 1960, it was relatively unheared of that gifted children existed among disadvantaged populations. Studies of such population largely emphasized the remediation of their social and academic difficulties with relatively little attention being focussed on those children who possessed unusually high potential for learning and creativity (Renzulli, 1973). The development of mental ability was differentially affected by growing up in a low SES as compared with a high SES environment interms of specific items of experiences or knowledge picked up in different environments.

Renzulli (1973) gave a description of some of the elements of the abilities that human beings generally acquire in the course of their development and how these were specifically affected by environmental inputs and create the varieties of psychological syndrome now generally referred to as "cultural deprivation", which has received greater attention today.

Rath and Pattnaik (1978) used two groups of advantaged and disadvantaged children belonging to the age group of 9+ who were administered the tests of progressive matrices and verbal reasoning at the initial stage. The each group was divided into three sub-groups of which one constituted the control group and the other two experimental groups. Incentive and training in the related are as were given to them. Training appeared to be most effective in improving the test scores. The disadvantaged improved more than the advantaged and reached the same level as the latter after training. In the tests of conservation for volume and length there was a remarkable improvement after training in the related field. Positive transfer in learning was reported in the investigation. But the study had several methodological pitfalls in terms of design and treatment of data.

Ahmed and Joshi (1978) invested the impact of social disadvantaged on non-verbal creative thinking in 120 students from advantaged or disadvantaged schools, advantaged or disadvantaged homes and 7th, 9th or 11th grade. Scores on Baqer Mehdi (1973) non-verbal tests of creative thinking showed that home and school differences were important only at the 7th grade level, whereas the combined effect of the 2 environments were significant through 11th grade. At the higher grade level irrespective of type of schools, there occured more rapid increase in creativity of disadvantaged subjects compared to their advantaged counterparts.

Forman (1979) found the effects of socio-economic status on creativity in elementary school students. He administered the Wallach-Kogan tests of creativity, the Primary mental abilities tests, and subjects from the lowa, tests of Basic skills to 129, 2nd graders. Results of multivariate ANOVA indicated that upper class children scored better than lower class subjects on creativity measures but that when IQ on achievement level was covaried, differences between upper and lower class subjects were not significant.

Seetharam and Vedanayagam (1979) investigated the effect of socioeconomic status on creativity. The sample consisted of 147 boys of grade VIII, belonging 6 rural high school. The Wallach Kogan instrument of creativity adopted by Faramesh (1971) were chosen for the study and the Parack and Trivedi scale (1964) of socio-economic status was chosen. Socio-economic status failed to influence creativity differences.

Ahmed and Joshi (1980) reported on the impact of socio-cultural disadvantages on verbal creative thinking of 120 subjects belonging to advantaged and disadvantaged home back grounds. The instituions to which they belong were of four categories such as extremely advantaged school (EAS), extremely disadvantaged school (EDS), slightly advantaged school (SAS) and slightly disadvantaged school (SDS). It was revealed that home background played a relatively insignificant role in EAS and EDS but in SAD and SDS the role was dominant.

Zigler and Abelson (1982) researched into whether intervention program is necessary in order to improve economically disadvantaged children's IQ score. Head start and non Head start group were tested on IQ and motivational measures 3 times before the during the Head start year (Pretest, retest and post test). Both groups showed comparable IQ gains on retesting but only Head start groups showed continued gain from pretest post-test.

Haley (1984) studied the effects of SES and problem solving training methods on the creative response styles of 47, 4-5 years old middle class Black children and 42, (5-6) years old disadvantaged Black children by randomly assigning them to 1 to 3 problem solving training situations: Sociodrama, verbal or control. Divergent production was measured by response to open-ended problems on the thinking creatively in Action and Movement Test. Results showed that fluency in verbal, kinetic, and integrative mode was affected by SES with middle class children performing significantly better in verbal modes, disadvantaged children performing better in the kinetic mode. Fluency and originality in kinetic and intergrative modes of solutions were affected by problem solving training.

Speidel (1984) investigated the effect of specific clay forming activities on the figural and verbal creativity of first grade children (n=26) drawn mainly from disadvantaged minority group backgrounds. The supposition that instruction in clay forming promotes creativity was proved.

Honegar (1984) conducted a similar experiment, nurturing the creative problems in gifted disadvantaged youth. Disadvantaged children performs more creatively in figural fluency than advantate children. Creative problem solving was another nurturance approach that could be applied to the art medium Pictures had been used to break away from the obvious and common place, to restructure and to synthesize. Creative dramatics and story telling facilitates the development of verbal fluency, self confidence and creative problem soling skills. Creative writing was a powerful agent of hidden talents. It was suggested that future research should focus on the creative position of each minority subculture.

Ahmed and Joshi (1984) observed the impact of socio-cultural disadvantage on originality, fluency and flexibility of verbal creativity on 120 children belonging to advantaged and disadvantaged home back grounds studying in two enriched and two deprived schools at 7th and 9th and 11th grade levels. Cross comparison of the originality was scores of verbal creativity test revealed that originality was very much affected by the enriched home environment as compared to the school background only at 7th grade level, while at higher grade levels advantaged school background dominates over the effect of an enriched home background. However, in case of fluency and flexibility factors neither home nor school environment play any significant role at any grade level.

Muralidharan et al. (1984) conducted a study on 144 tribal children following experimental control pretest post-test design. The Anganwadi workers of the experimental group and control groups were given pretest in language and cognitive tasks. The Anganwadi workers of the experimental group were given a tendency orientation in techniques of story telling, conservation, picture reading, songs and games, art activities etc. The workers then supplied with picture cards, picture books, songs and games for use with children. The Anganwadi workers were asked to use the materials constantly and after about 8 weeks, a post-testing was done. The results showed that in most of the tests, the experimental group showed a higher gain than the control group. It thus emerged that no matter how disadvantaged the children were, well planned early childhood education strategies do make an impact and foster the development of children.

Pandey, Pandey, and Rai (1986) studied creativity in relation to socio-economic status of High school students. Socio-economic factor largely determined the thinking processes. It had generally been recognised that the development, manifestation are stability of creative ability depend upon the existing socio-cultural environment and economic structure.

Krishna, Lalitha, and Paramaj (1986) studies on the creativity among tribal children in relation to their sex and socio-economic status. It was proved that the girls were better in their verbal creativity and boys were superior to girls in non-verbal creativity. It was also found that the tribal children from low socio-ceonomic status were inferior to the high socio-economic status group in the level of creative thinking.

Das and Rath (1986) did an experimental study on effects of cognitive stimulation on disadvantaged and non-disadvantaged pre-school children. A group of schooled non-disadvantaged and another group of non-schooled disadvantaged preschool children, 16 in each group, were given training on a battery of cognitive tasks for eight weeks to determine the efects of training on certain other cognitive test scores, the visual Reception and Assciation test scores. The visual reception and asociation subtests of I.T.P.A. and Draw a Design and Draw a child subtests of McCarthy bettery were administered to both the groups prior to and after direct intusive cognitive training in sequential thinking, figure ground perception, shape discrimination, visual recall and visual discrimination. Results revealed that (a) training on these cognitive tasks improved the scoress of other cognitive tests (b) both the schooled non-disadvantaged and non-schooled disadvantaged children's performance showed significant improvement, but the rate of improvement was greater for the latter groups.

Clarke and Clarke's article (1989) reviewed research on cognitive effects of early intervention with disadvantaged preschoolers. While early intervention typical yields short term advantage for children and their parents after programme termination, cognitive increments usually follow the law of diminishing returns unless the interventing set off a chain of on going, positive consequences continuing intervention and maintainance of these changes was unlikely. Familiar factors were more important for long term outcome than brief interventions themselves.

Creative thinking is a process and product. Isaken (1983) has revently provided evidence that many facilitators, program developers and curriculum planners relay most heavily upon the lowest levels of the creative learning model, and heavily stress cognitive methods and techniques. At least 60% of the methods and techniques indicated by such specialists as most frequently employed here full into level I and II, cognitive of the creative learning model (Isaken 1983). These data illustrate the need for a broader, more comprehensive framework for creativity specialists or facilitators to employ in their work. There would be necessary of employing more higher levels of cognitive and affective aspects of creative thinking. The cognitive and affective aspects of creative thinking was based on the theoretical frame model of Treffinger, (1980).

Torrance and Torrance (1973) surveyed a large number of studies and the report said that the most successful approaches seem to be those that involve both cognitive and emotional functioning, provide adequate structure and motivitation and give opportunities for involvement, practice and interaction with teachers and other children. Motivating and facilitating conditions certainly make a difference in creative functioning but differences seem to be greatest and most predictable when deliberate teaching is involved.

It would be better if both cognitive and affective training programme are taken into account and see which would be more effective in developing creative thinking as the unique aspects of creative thinking involving cognitive processes and development of related personality function such as feeling and affect.

It is evident that creative thinking is learned behaviour which can be developed by application of appropriate teaching practices and by manipulating environmental conditions in the classroom. A veriety of interrelated factors that facilitate or hinder creativity development imply that an attempt to develop creative potential will be moreeffective if the teaching method includes the strategies which are designed to creat favourable condition. If the teacher consistently and systematically attempts to provide these conducive conditions through classroom teaching practices the quality of thinking of students can be improved considerable. This would go a long way in helping the socially disadvantaged children and would add to their strength.

Highlights

Disadvantaged children by and large are inelastic, less analytic, less field indepedent, and impulsive. Social class and deprivational level are intimately related. The ability to think creatively is affected by adverse family conditions but it is apparent that creative thinking among the disadvantaged can be developed by designing conducive environment.

REFERENCES

Agarwal, V.R. (1984). A Study of Reading Ability in relation to cert in cognitive and non-cognitive factors. Indian Educational Review, Vol. 19(3).

Ahmed, S. and Joshi, R.K. (1977). Effect of Sociocultural Disadvantages on non-verbal creative thinking ability among school going children. Indian Journal of Psychology, 52, pt. 4, 342-349.

Ahmed, S. and Joshi, R.K. (1978). Creative growth among disadvantaged children. Psychologia : An International Journal of Psychology in the Orient, 2,3, 161-166.

Ahmed, S. and Joshi, R.K. (1980). Effect of Sociocultural Disadvantages on Verbal Crcativity Thinking Ability Among School-Going Children, Journal of Education and Psychology, 37,4, 131-138.

Ahmed, S. and Joshi, R.K. (1984). Effect of Sociocultural Disadvantages on Verbal Originality, Fluency and Flexibility of creativity. Journal of the Institute of Educational Research, 8,2, 18-24.

Berry, J.W. (1976). Human ecology and cognitive style. N.Y. Wiley.

Clarke, A.M. and Clarke, A.D. (1989). The latter cognitive effects of early intervention, Intelligence, 13, 4, 289-297.

Dash, A.S. and Rath, S. (1986). An experimental study of effects of cognitive stimulation on disadvantaged and non-disadvantaged pre-school children. Psycholingua, 16, 17-26.

Deutsch, M. et al. (1967). The Disadvantaged Child. New York : Basic Books.

Fabun, D. (1969). Your and Creativity. California, Glencoe Press.

Forman, S.G. (1979). Effects of Socio-economic Status on Creativity in Elementary School Children, Creative Child and Adult Quarterly, 4, 2, 87-92.

Gardner, H.W.; Holtzman, P.S.; Klein, G.S. and Spence (1959). Cognitive Control: a study of individual consistencies in cognitive behaviour. Psychological Issues, 1, (Whole No. 4).

Goodenough, D.R. and Karp, S.A. (1961) Field independence and intellectual functioning. Journal of Abnormal and Social Psychology, 63, 241-246.

Haley, G.L. (1984). Creative response styles. The effect of Socioeconomic status and problem solving training. Journal of Creative Behaviour, 18, 25-40.

Honegar, L.E. (1984). Nurturing the creative promise in gifted disadvantaged youth. Journal of creative Behaviour. Vol. 18(2), 109-116.

Isaksen, S.G. (1983). A curriculum planning scheme for the facilitation of creative thinking and problem solving skills. Unpublished Doctoral Dissertation. State University of New York at Buffalo.

Kagan, J.; Moss, H.A. and Siegel, I.E. (1963). Psychological significance of styles of conceptualisation, Monograph of the society for Research in Child Development. 28, 73-112.

Kaul, V. (1989). Strength of the socially disadvantaged. New Delhi; Northern Book Centre.

Krishna, K.P.; Lalitha, and Paramaji, S. (1986). Study of Creative abilities of tribal children in relation to their sex and socio-economic status. Journal of the Institute of Educational Research, 9, 4, 1-4.

Kumin, L.B. (1970). The relationship among free association verbal behaviour, socio-economic status and mode of stimulus presentations in Kindergarten and fifth Grade Children, Dissertation Abstracts International, 30, 7-8, 3423.

Moreno, J.M. and Hogan, J.D. (1976). The influence of race and social class level on the training of creative thinking and problem solving abilities. Journal of Educational Research 70(2), 91-95.

Muralidharan, R. (1984). The impact of an intervention programme on the language and cognitive development of preschool children from tribal and urban slums. Report on National Conference on Research on ICDS, NIPCCD, 44-45.

Pandey, R.C.; Pandey, R.N. & R.N. (1986). A study of creativity in relation to Socio-economic status of high school students. Journal of the Institute of Educational Research, 10, 1, 912.

Raina, M.K. (1968). A study of some correlates of creatively in Indian students. Unpublished Ph.D. Thesis, University of Rajasthan.

Rath, R. & Pattanaik, N. (1978). Effects of training on some cognitive abilities. Journal of Psychological Research, 23, 81-92.

Renzulli, J.S. (1977). The enrichment triad model. Mansfield Centre, CT: Creative Learning Press.

Rohwer, W.D. and Harris, W.J. (1975). Media effects on prose learning in two populations of children. Journal of Educational Psychology, 69(5), 651-657.

Seetharam, R. and Vedanayagam, E.G. (1979). Creativity and Socio-economic status. Journal of the Institute of Educational Research, 3, 2, 35-37.

Speidel, G.E. (1984). Developing Creative Thinking Through Clay Forming Activities. Educational Perspectives, 22, 3, 22-25.

Torrance, E.P. (1977). Discovery and Nurturance of giftedness in the culturally different. The Council for Exceptional Children. Virginia.

Torrance, E.P. and Torrance, J.P. (1973). Is Creativity Teachable? Fast Back no. 20. Bloomington, Indiana Phi. Delta Kappa.

Treffinger, D.J. (1980). The progress and peril of identifying creative talent among gifted and talented students. Journal of Creative Behaviour, 14, 20-34.

Witkin, H.A. (1965). Psychological Differentiation and Forms of Pathology. Journal of Abnormal Psychology, 70, 317-336.

Witkin, H.A. (1969a). Social Influences in the Development of Cognitive Style. In D.A. Yosten (ed.) Handbook of Socialisation Theory and Research. N.Y. Randmcnally, pp. 687-706.

Witkin, H.A. (1969b). Some implications of research on cognitive style. for problems of education. In M.G. GoHsegen and Y.B. GoHsegen (eds.) Professional School Psychology, N.Y. Grine, 3, 198-227.

Witkin, H.A.; Dyk, R.B.; Faterson, H.F.; Goodenough, D.R. and Karp, S.A. (1962). Psychological Differentiation N.Y. Wiley.

Witkin, H.A.; Oltman, P.K.; Ruskin, E. and Karp, S.A. (1971). A manual for the embeddel figure tests. Palo Alto: Consulting Psychologists Press.

Witkin, H.A. and Berry, J.W. (1975). Psychological Differentiation in Cross Cultural Perspective. Journal of Cross Cultural Psychology, 6(1), 4-87.

Zigler, E. and Abelson, W.D. (1982). Is an intervention programme necessary in order to improve economically disadvantaged children's IQ score? Child Development, 53, 340-348.

9

SCHEDULED CASTE CHILDREN: Characteristics, Issues and Educational concerns

Focus points

Why do we now talk so much of education among Scheduled Caste children? What was the legacy? What are the limits of their educability? Do we notice any behavioural difference between the Scheduled Caste and Caste Hindu children? Can the differences be bridged? Do these children have any special issue and concerns? What can education offer to improve their conditions? The chapter on Scheduled Caste children brings into light various sidelines and vistage of information.

Scheduled caste: State of art

Education and social upheaval of scheduled caste is a post independent phenomenon and is characterised by a steady increase in the interest of education in a planned manner through various programmes and policies. The National Policy on Education 1986 has amply emphasized the need for a cultural revolution.

The scheduled caste have various caste groups within it. They were made to live outside the villages and were integral part of the village life. As Srinivas (1966) writes they perform certain essential tasks: village servants, messengers, and sweepers and they beat the drum at village festivals and every one listens to this at community dinners. The position has changed since then. After 1930 Dr. Ambedkar concentrated his attention on the improvement of educational standard of the community and their political status. Mahatma Gandhi emphatically adopted a resolution in "The National Congress", about the necessity of justice and righteousness of removing of disability imposed by customs on the untouchables.

In 1902, Gandhiji wrote "Untouchability cannot be given a secondary place in the programme. Without removal of the trait, Swaraja is a meaningless term". There is a series of change and movement followed this upsurge from 1920 to 1932 when Gandhiji started his Harijan in 1933. Dr. Ambedkar wrote in it "The outcaste is a by-product of the caste system. Nothing can emancipate the outcaste except the destruction of the caste system". The movement took very considerably and steadily the cause and in 1950 the constitution abolished the concept of untouchability. The Harijan enjoys the same legal rights as any other citizen. Despite central and state efforts to improve their economic, land, social position, they remain relatively poor, semiliterate or illiterate,

Scheduled caste have a culture of their own. Mandelbaum (1973) refers the mutual expectations, understandings and behavi our patterns held by the people among whom a person grows up and in which society, he becomes a participant. Mohapatra (1964-65,1978) has highlighted the life style of Bauris who have own rituals and festivals. Tripathy (1968-69) mentioned about Bhois of Bhubanceswar, their social relations are confined to their own personal choice that are characteristic of the persons, groups and the common ways of working out the recurrent the conflicts of life. Social dimensions pertain to a person's relations, choices, and decisions and are not culturally stipulated. Psychologically the various scheduled caste groups are characterised by their own class, a world of feelings and attitudes. They are individually experienced but each individual's subjective experience is likely to be similar in some part to that of others in his own society.

The legacy

Education of scheduled caste has a long genesis. When East India Company, was consolidating its position in India, the indigenous educational practices were more or less on the medieval lines. Separate institutions existed for Hindus and Muslims. The institutions for Hindus were different and their courses were generally drawn on the basis of caste occupation requirements. In the initial stages, participation of the company was in the form of patronage to the missionary schools. New and then some philanthropic missionaries drew company's attention to the illiteracy of the masses and need for opening elementary schools for the peasantry and other poor classes. As a result, a vernacular schools on European lines were established.

Jotirao Phooly in 1864 crusaded for the education for Harijans with the announcement of a new policies on education. His attempts to open special schools for Harijans found a material support on the grants-in-aid system. At the Governmental level, the presidency of Bombay gave a lead in this endeavour. As against such discouraging state for Harijans, about two and a quarter million pupils from the general population were studying in the country (Perlukar, 1953).

The Education Commission of 1882 recommended for a systematic effort for popularising education among Harijans. Policies were laid down and funds are earmarked. The provincial governments did not act on the recommendations pertaining to Harijan education, perhaps for the fear of social resistance.

Certain things were apparent. Harijans were educationally backward sections in the country. Educational progress among the females was much less than the progress among males. Most of Harijan pupils did not continue their education beyond lower primary stage. The proportions of Harijan pupils in the common schools at the lower primary state and upper primary stages have been retained higher than their proportions in the special and private schools.

The transference policy on education advised the provincial governments to attach more importance to the educational advancement of the Depressed Backward classes (Report on Education in India under the New Reforms No. 201 Feb., 23, 1920). After World War I, the attitude of the British Government towards the policy of universal compulsory education also softened.

In 1929, under the Government of India Act of 1919, an auxiliary committee under the chairmanship of Sir Philip Hartog was appointed. The Committee insisted that the Harijan pupils should not only be admitted to common schools but also be given equality of treatment. The Swarajya movement and the growing political controversies over the status of minorities in India had hardly left any alternative before the Nationalists except seeking support of Harijan castes by accepting them as a caste. Introduction of provincial Autonomy in 1937 and assumption of power by the Indian National Congress enlivened the hope that the new leadership would do speedier work for the welfare of Harijans. The Government of India Act 1935, incorporated the principle of joint electorate between the Hindus and Harijans. This Act put an end to the diarchical system of administration and abolished the distinction between the provincial Govts. and the voluntary organisation. This expanded the scope of developing education in Harijan communities. Before independence, a number of Harijan pupils showed a rising trend in almost all the provinces.

Between 1947 and 1950 the policies and schemes laid down for the British provinces were generalised for the whole country. The Government has been making efforts to extend educational opportunities to Harijan communities over the last fifty years. Inspite of this, Literacy level of Harijans, has always been lower than of the general population.

Unfortunately, we have largely concentrated on fostering equality without going into the meaning of equality in the context of learning. Our desire to feed statistics on enrolment has led to ignoring the question of relevance of education, in life situations.

Poverty was a major impediment for formal education of Harijan children. Parental illiteracy, role of the child in the economic activities of the family and social customs impeded fermentation of education in these people.

The equality through education was emphasised yet for another reason. It was considered that the provision for equality in education with some safeguards for employment would prevent any precipitative social action in crisis situations especially where violence or rebellion erupt due to inequalities and discrimination. Education and equality generate a multiplier effect leading to the demand for each other by creating social and political consciousness in the people.

In the year 1947 independence was heralded. A century long effort to change the condition and raise status of the scheduled caste students were provided with free board and lodging to enable them to pursue their studies at the secondary and higher stages. Grants in aids for clothes, books and educational materials were also made available. Jobs under the

Government were reserved for educated youngmen and women from scheduled castes. As a result scheduled caste education progressed markedly after independence, in 1947.

Demography, incidence and literacy

The scheduled castes in each state/union territory are enumerated as per the list of such caste mentioned in the Presidential order "The Scheduled Caste and Scheduled Trie Lists" as amended from time to time. As per this order, no Scheduled Caste has been listed in Nagaland, Andaman & Nicobar Island and Lakshadweep.

The total population of Scheduled Castes as per the 1991 census was 138.2 million, excluding Jammu & Kashmir. The Scheduled Castes constitute 16.48 per cent of the total population of India, as against 15.8 per cent in 1981. Thus, the propotion of Scheduled Caste population has gone up in the country over the last decade.

The highest percentage of Scheduled Caste population was in Punjab (28.31%) and the lowest in Assam (7.40%). Apart from Punjab, West Bengal and Uttar Pradesh are the two other major States in which children in the age group 0-6 constituted 19.63 per cent of the scheduled caste population as against 17.94 per cent for the general population. The Scheduled Caste population had more children than the general population, which appears to show a higher birth rate among the Scheduled Caste population.

The literacy rate of the Scheduled Caste population aged 7 years and above is 37.41 per cent for males and 23.76 per cent for females. These figures are much lower than the corresponding figures for the general population. However, the literacy of the scheduled caste population has increased from 25.82 per cent in 1981 to 37.21 per cent in 1991, (excluding Assam and Jammu & Kashmir). In case of males, the increase is from 37.67 per cent to 49.74 per cent while in case of females the increase was from 13.00 per cent to 23.52 per cent. The rate of increase of female literacy among the Scheduled Castes has thus been much higher over the last decade than male literacy rate. This is in tune with the trends noticed for the general population. It is, however, seen that the literacy rates for the states of Uttar Pradesh, Bihar and Rajasthan are much lower for the Scheduled caste population than that for the general population. The literacy rates for the scheduled caste population and the total population for three states were: respectively

26,85 per cent and 41.06 per cent in Uttar Pradesh. 19.49 per cent and 38.48 per cent in Bihar & 26.29 per cent and 38.55 per cent in Rajasthan. The position in respect of literacy among the scheduled caste women was much worse in these States. The female literacy rates among the scheduled caste population and total population respectively were 10.69 and 25.31 in Uttar Pradesh, 8.31 and 20.44 in Rajasthan and 7.07 and 22.89 in Bihar. Rural-urban scheduled caste literacy is given in Fig. 1

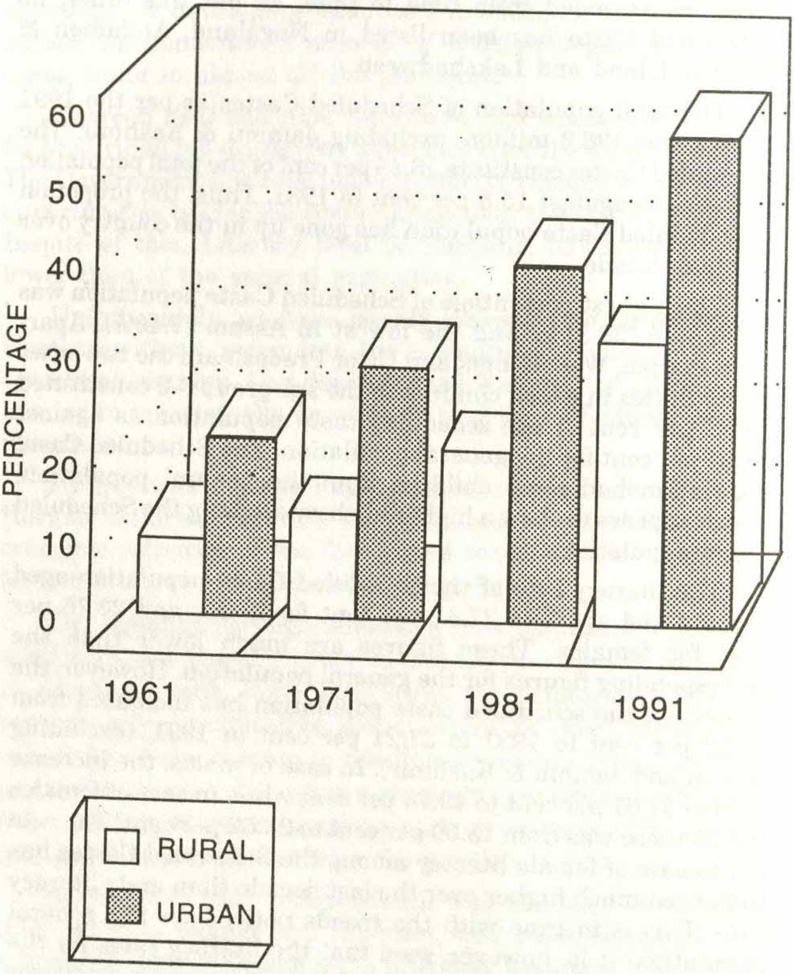

Fig. 1. Literacy Rates of Scheduled Castes (1961-1991)

The scheduled castes constitute more than 20 per cent of the total population. The proportion of scheduled caste population among States varies widely in each State.

The Decadal growth rate of the scheduled caste population has been more than that of the general population during the last decade: the Scheduled Caste decadal growth rate being 30.99 per cent and that of the general population 23.79 per cent.

More than 81 per cent of the Scheduled Caste population live in rural areas. Among the major States, only 6 states had more than 20 per cent of the scheduled caste population living in the urban areas: Gujarat, Maharashtra, Karnataka, Madhya Pradesh, Tamilnadu and Punjab.

Enrolment and retention trends

Primary (I-V)

Enrolment of SC children at various levels of education is one of the indicators of educational development. These are observed in terms of percentage of total enrolment, absolute numbers, gross-enrolment ratio and net enrolment ration. So far as trends are concerned the ratios of any sort gives the line of growth. Gross enrolment ratio of SC children at primary level since independence reveal a consistent increase and as per cent to total enrolment it has remained fairly satisfactory. In terms of absolute numbers the total number of SC children (CA 6-11) in primary schools were 16037107 in 1991-92 compared to 1980-81 figures which was 10980840. The population of SC noticed fifty per cent increase over the two periods (80005000-1981) and (138223000-1991) there is an increase in the total enrolment position of SC children at primary level. Gross enrolment ratios indicate enrolment position with reference to child population of a specific age, with average and underage admissions gives a clear picture. In 1970-71 the GER was 61.5; 82.2 in 1980-81, 102.21 in 1990-91 and 1991-92 it was 103.00 at Primary stage (Table 9.1). There is a systematic progression towards high enrolment of SC children over the years. If one looks at the NER i.e., enrolment of children of a specific age group the ratio comes down a little but the increase trend remains consistent. This is true for both boys and girls during last decade although in case of girls it is at 2.5. An index of UEE is not known from mere enrolment in Class I but from

Table 9.1: Gross enrolment of Scheduled Caste in Elementary Education

Year	*Boys*	*Girls*	*Total*
1970-71			
I-V (6-11)	NA	NA	61.5
VI-VIII (11-14)	NA	NA	20.6
1980-81			
I-V(6-11)	105.4	57.8	82.2
VI-VIII (11-14)	41.4	16.2	29.1
1985-86			
I-V(6-11)	116.6	73.2	95.5
VI-VIII (11-14)	57.8	26.2	42.5
1990-91			
I-V(6-11)	122.68	80.60	102.21
VI-VIII (11-14)	61.40	33.28	47.71
1991-92			
I-V (6-11)	121.4	83.6	103.0
VI-VIII (11-14)	68.9	86.0	52.9
1992-93			
I-V(6-11)	127.99	92.18	110.58
VI-VIII (11-14)	75.00	44.04	59.97
1993-94			
I-V(6-11)	123.33	91.15	107.81
VI-VIII (11-14)	74.21	45.01	60.17
1994-95			
I-V(6-11)	127.22	92.55	110.36
VI-VIII (11-14)	74.40	44.44	59.84

$$\text{*Enrolment ratio} = \frac{\text{Enrolment of SC students on rolls}}{\text{Population of SC in the corresponding group}}$$

retention over the years. SC children have shown relatively increased retention in the system during the 80's and 90's compared to the earlier period even though the percentage of retention is still very low at primary stage (Table9.2).

Middle level (VI-VIII).

In case of middle level schooling, the enrolment figures have increased from 2222385 in 1980-81 to 3136939 in 1991-92 in terms of numbers. The per cent to total enrolment is fairly satisfactory. The Boys and Girls enrolment ratio happens to be 2.5:1 level which was also maintained at Primary level. If one looks at the enrolment over periods of time, the ratio was: 20.6 in 1970-71, 29.1 in 1980-81, 47.71 in 1990-91 and 52.90 in 1991-92. This gives a fairly steady increase over the years even though the picture is not very much encouraging. The drop out rate of Class VIII is in 88-89 and 67.78 which is high. No further data is available.

Table 9.2: Drop out rates (Scheduled Caste)

Year	*Primary*	*Upper Primary*
1980-81	60.16	76.84
1981-82	59.21	74.76
1982-83	60.27	72.44
1983-84	57.84	72.36
1084-85	55.40	72.16
1985-86	52.53	72.50
1986-87	50.79	69.15
1987-88	51.38	68.81
1988-89	49.62	67.78

Breakup of Drop Out Rates (1988-89) Scheduled Caste

Classes	*Boys*	*Girls*	*Total*
I-V	47.24	53.39	49.62
I-VIII	64.37	73.60	67.78
I-X	76.52	85.62	79.88

Secondary Schools (CA 15+, IX-X)

Enrolment of SC children in Secondary Schools since 1980-81 indicate two fold increade in absolute numbers 1151896 (including (XI-XII)1724121 inn 1990-91 and this constitutes a stable percentage of total enrolment. The drop out rate of Class-X in 88-89 was 79.88 and no recent data are available.

Certain general observations can be made at this stage. The proportion of enrolment of SC children continues to be much less than their population proportion except in the case of primary education where enrolment ratios are comparable to general enrolment. Drop out rate of SC children continues to be high at all levels. Enrolment ratio in respect of SC girls are at a lower level compared to SC boys and the rate of increase from year to year is also quite upto mark.

Higher education and professional education

An observation of enrolment figures in higher education professional education, Teacher Education etc. indicate that there is a steady increase in enrolment for doctoral degrees, higher enrolment in M.A., M.Sc. & B.A.(Hons), B.Com(Hons.), B.Ed., Teacher Training, Industrial crafts and Polytechniques. The number of girls are also being significantly greater over the years. The number of SC students in higher education during last 6 years are given below for reference. The percentage of enrolment to total overall enrolment is less than 4 (Table 9.3).

Table 9.3 : Scheduled Caste students studying at different levels in colleges and universities (All India Figure)

Courses	*86-87*	*87-88*	*88-89*	*89-90*	*90-91*	*91-92*	*92-93*	*93-94*	*94-95*	*95-96*
Ph. D/Dil/D. Phil.	644	812	914	700	751	938	945	1214	1387	1514
M.A.	16157	19859	20356	21370	22976	24294	23362	25700	29152	36382
M.Sc.	2320	3113	3628	3423	3682	4299	4188	3953	4546	7066
M.Com.	2180	4758	4902	5606	6313	6376	6325	6472	5726	5987
B.A. (Hon.)/B.A.	102975	137981	142856	153046	159167	185493	193889	194083	226841	273568
B.Sc. (Hon.)/B.Sc.	31694	37085	38587	41993	44456	48640	56117	58331	61439	78285
B. Com. (Hon.)/B.Com.	29262	42811	42248	49003	52297	60770	59954	60897	5587	60084
BE/B.Sc. Eng./BArch	6764	11075	12080	13669	13796	12758	13924	16953	20153	21084
B.Ed./B.T.	5752	6234	6979	7575	7704	8437	8746	9356	11868	12535
M.B.B.S.	5313	6870	7170	7205	7283	7137	6367	7148	9363	9961
Inter	54312	180776	170695	242547	248887	13573	145118	185815	222690	568068
Pre-degree	6019	16575	28499	30690	30762	38110	—	—	—	—
Teacher Training	7603	8310	10099	10103	14100	15426	14461	15698	21656	21152
Poly Technique	15988	23079	25523	25790	23557	26460	38594	34045	34376	36392
Industrial Craft	22890	30485	30888	46788	49064	54377	52879	56120	53066	52832
10 + 2	95645	294412	327773	320995	333808	520423	527354	688275	618296	657628

Source : Selected Educational Statistics (10 year period)

Psychoeducational characteristics

The large scale under-achievement of children in schools has attracted public attention and concern among many parents, teachers and organisations. The teachers explain this failure in terms of defects in ability rather than neglect, even though the latter has some role to play. Educability or capacity to profit from instruction is due to cognitive ability of the child, linguistic competence, motivation, perceptual ability, conceptual ability. The SC children suffer from a subnormal growth of these abilities due to socio-cultural deprivation. They show (a) Progressive decline in mental ability, (b) Cumulative achievement deficits and (c) Premature school termination and high drop-out rates.

Because of socio-economic backgroundness, these children practically have lower grades, their health is poor, and they have deficiencies in skills of reading and language, necessary for success in school. They have minimal training in disciplined group behaviour and educationally are less ambitious. They also show incapacity in cognitive processes such as the ability to observe and stating sequences of event, perceiving cause and effect relationships, classifying concrete objects, attributing responsibility to self and in general have poor self concept. The combination of non-verbal orientation and an absence of conceptualisation very well account for their intellectual deficits. In Piagetian terminology, formal logical thinking is absent in all such children or appear very late in the school.

Achievement of scheduled caste children, tends to be low as the insitutions are practically not designed for him but for a middle class child. The society around the school, peer group, the language are all geared to middle class culture not directly related to the needs and aspirations of the scheduled caste children's environment and ecology of the school becomes indifferent.

The school culture and expectation seem hostile to this segment of the school population which is the SC. They stagnate and drop out from the system prematurely. In fact, if we predict the drop out rates to be reduced in the immediate future, we can in the same tone say that the school population will increase exactly in the same rate.

The consequences of the cognitive deficiencies are again complicated by their pattern of motivation and attitudes.

Psychologists explain that these children have a feeling of alienation induced by family climate and experience combined with a debilitatingly low self concept. They tend to question their own worth, fear of being challenged, and to exhibit a desire to cling to the familiar. They have feelings of guilt and shame. These children are wary, and their trust in adults is limited. They are apathetic, unresponsive and they lack initiative. These characteristics are rooted in early childhood family background.

The attitudes of the teacher and the curriculum in the school increase the alienation of these children. Very often there is a communicable gap between the teacher and the students, the objectives of instruction and the actual evaluation of instruction, in the meanings attached to verbal cues employed in teaching, and curriculum materials and the meanings which these children have acquired in their out of school experience.

The lower achievement of SC children could be attributed to : Malnutrition, genetic, lack of stimulating early experience, social motivations, cultural values and impulsive cognitive style. SC children use sequential processing than simultaneous processing in tasks which demand simultaneous processing.

Panda and Das (1970) examined the relative effects caste and class factors influencing performance on Stroop Test and two verbal conditioning tasks. One hundred and sixteen boys aged between 8 and 10 years were used as SC. They were reading in grades 4 to 6 in the same schools. On the parental income and caste they were divided into rich (R) and poor (P) Brahmins (H) and Harijans (L). Each of the four groups HRHP, LR and LP had 29 Ss with comparable mean (from 9 to 0, 6 years) and grades.

Belonging to high caste and to the high economic class seems to be associated with faster reading speed. The superiority of the high caste over the low approaches a statistically significant level but it was consistant with earlier findings and may be traced to the scholastic traditions in high caste homes. The rich poor difference was not obtained in the earlier study in which the groups were much closer income. When the contrast in the economic levels is increased, the rich have an advantage over the poor in reading speed.

In reading speed the Brahmins exelled the Harijans regardless of economic status, whereas in colour naming speed the rich were superior to the poor. Short term memory scores were available for 27 rich Brahmins, 25 poor Brahmins and 28 poor Harijans. Other Ss dropped out from school and could not be traced. Results of t-test showed significantly poor recall scores of the Harijan sample compared to the poor Brahmins and rich Brahmins. The study of course did not answer whether Harijans had a poor cpacity for recall or inefficient coding in STM task.

The recognition experiment yielded two scores for such subject correct recognitions for unimodal and crossmodal tasks. Harijans committed a large number of errors in writing auditory materials. These errors would obviously make it hard for the Harijan child to profit from classroom instruction. Harijan children were found to have relatively less facility with crossmodal coding than with unimodal coding. From the results it appears that belonging to a low caste appeared to account for the inferior performance of a child in some cognitive task. It seemed as if caste were one's destiny. (Das, Joehuck and Panda, 1970).

Tripathi and Mishra (1975) found that on six tests of cognitive and mental ability the low-deprived group did better than high-deprived group. Castewise analysis failed to show any difference, implying there by that SC/ST did as well as the born highs. Rath (1973) also confirms that on the basis of intelligence that there were no difference among children born Brahmin, Scheduled Caste, and Scheduled Tribe.

To what extent deprivation affects performance of these young pupils over a variety of situations having different educational relevance and achievement related dynamics was studied by Das and Panda, (1977).

On intellectual achievement responsibility attribution in failure situations Harijan children were more external, impulsive and had poor self-concept. The discrepancy betwen Brahmins and Harijans increased with increasing educational levels. Coming to intellectual performance, the SC children showed poor performance in Digit forward and Backward, reflective mode of responding, concept learning, word recognitions with reference to acoustically similar and Neutral words, performance in digit symbol test, memory for designs, verbal, quantitative and total achievement scores on the basis of teacher made tests.

Whiteman and Deutsch (1968) after reviewing the literature on social disadvantage, intellective and language development stated that there is discontinuity between requirements and the child's prior preparation and experiences. The children from a disadvantaged environment misses some of experiences necessary for developing verbal, conceptual, attentional, and learning skills requisite to school success. Because of this deficit there is progressive alienation from school environment and this alienation contributes to cmulative deficit of the disadvantaged child over time in their scholastic achievements.

Dutta and Panda (1977) have observed the consequence of malnutrition on intellectual performance of the low income group children. The study included 360 (180 tall, 180 short) children. The Sweden Conference made it clear that stunting of the child can be considered as an index of malnutrition. All these children came from two caste groups Brahmin (High) and Harijan (Low). The Harijan sample was drawn from both rural and urban schools but the Brahmin sample was only from rural schools. A large number of children were tesed with regard to their heights fall below Q_1 were included in the short category and all those whose heights were above Q_3 were included in the tall category.

The urban Brahmin sample was not included in this study because of their consistent superior performance in the previous studies. Following Birch and Belmont (1964), children who are of short height were considered malnourished and the tall group acted as its control. Each of these children were given a series of cognitive tests including classroom learning tasks, social personal adjustment, self-concept, and cognitive style tests. Parents were also interviewed on a parental expectancy questionnaire. The analysis of the data revealed the following results: scores on parental expectancy of education of their children, keeping knowledge of children's progress, and making preparation for their educational attainment are consistently lower for all the four Harijan groups and short Brahmin children compared to tall Brahmin children. The scores in case of the short Brahmin children is also higher than those of Harijan groups. On parental interest about children's academic achievement however, the scores of all groups were fairly close except that of tall Brahmin group.

In school achievement, Brahmin children were better of than Harijan children. Tall Harijan children were superior to short stature Harijan children mostly in rural areas. On tests of cross modal coding and short term memory (visual) the effects of malnourishment was clear cut. Short stature children of low/high caste did poor compared to all groups of the respective categories. Brahmin children scored high compared to Harijan children. The colour naming and word reading speed did not reveal significant differences between short and tall groups but superiority of the high caste over the low caste was pronounced. Consistent with previous findings short stature children had lower intelligence as measured by Raven's Coloured Progressive Matrices than the children, the superiority of Brahmin children over Harijan (both urban/rural) got confirmed the data. Malnourished children identified by short stature were inferior is discrimination learning measured scores compared to the tall groups. Caste differences were not obvious in these areas, although the Brahmin children had more number of associations to functional words than that of the Harijan children. These results indicate the differential effects of malnourishment on cognitive performance of children and parental expectations.

Many of the deficits observed in the SC children are more motivational rather than cognitive. The SC children display some significant motivational problems which determine a major aspect of their behavioural patterns.

- They show belief in external factors i.e., luck, chance, fate etc. rather than their own self and activity. This inability to attribute causality to one's own behaviour accounts for poor motivation in any task.
- They can not delay gratification. Immediate tangible and non-contingent rewards are their need.
- They have high sense of avoiding failure than striving for success.
- They have poor self-concept, low achievement aspiration, and need achievement including lack of desire for self-actualisation.
- Their general behaviour lack intrinsic motivation. It is influenced by insecurity and anxiety which are negative motivational factors.

Agarwal and Srivastava (1978) made a social psychological analysis of Harijan students and studied their self-concept and level of aspiration.

Out of the total population of High Schools (15) and Intermediate Colleges (13) five were randomly selected from High Schools and five from Intermediate Colleges. All the Harijan students of these schools from X class onward were selected for the sample. The total sample consisted of 400 children.

Structured face to face interview and questionnaire were used. A persual of the results revealed that Harijan students perceived 6 positive characteristics namely - generous, social, tolerant, possessing good habits, sentimental and introvert, in themselves. Analysis of results also indicate that a large number of students feel that they had no weakness in their personality, i.e., Harijan students do not perceive any negative values in them.

The results of the ladder rating indicated that all the 3 GDS were indicating a complete confidence of Harijan students in their future. Harijan students showed quite high level of aspiration. Present conditions are more improved than what these were in the past.

Studies of scheduled castes, their characteristics, and understanding of their educational problem have increased during the last decade but a significant number of these related to status studies (Dube and Sachdeva, 1983). The diferences in personality, abilities, and achievement between scheduled caste and normal children have often resulted in measurement artifacts or equivocability due to caste specific testing materials.

Bansal (1973) has reported that during adolescence high caste Hindus are better adjusted as compared to Hindu scheduled caste groups. At college level scheduled caste students appear to be enduring, nurturant, and achievement oriented but suffer from abasement. They appear to be suffering from a crisis of personality orientation.

Education of scheduled caste children is plagued by the problem of irregular attendance. Pande (1980) reported that scheduled caste students who are regular perceived the school climate as positive and the converse was true in case of irregular students.

The school as an institution contributed more to hostility, negative attitudes, and segregation as a result of which scheduled caste children failed to attend school. However, scheduled caste children are by temperament more easily frustrated (Mishra, Srivastava and Tiwari, 1980). Desai and Uchat (1981) examined the self-concept of Harijan students had a positive self-concept. Although they perceived others well, others did not show similar reciprocal attitudes. Probably due to this discrepant perceptual system scheduled caste children suffered from an identify crisis and caste discrimination.

Difference in motivational levels between scheduled caste and tribal children and upper caste children have been reported in the study by Rath, Dash and Dash (1979). The percentage of dropout and irregular attendance was high in the scheduled caste group. Hence, it can be said that the educational problems or the scheduled castes are germance in the educational climate. The educational climate is also influenced by discrimination in assessment and perceived psychological climate (Pande and Tripathi, 1982). Shah (1982) in a very extensive study, has high lighted the educational problems of scheduled caste school and college students. Scheduled caste students come from an impoverished home environment. Yet they show high educational aspirations for parents and self. Nearly one-third of the students expressed difficulty in following instructions in certain subjects. Students at the school level and at the college level perceived the teacher's attitude as conducive, helpful and sympathetic in recent years.

Panda (1982) demonstrated the relationship of parental life style with intellectual achievement responsibility, adjustment and cognitive performance of underprivileged children. The parental life style constitutes - parental life, parental expectancy, achievement orientation, and parental feeling of control and the children behaviour includes - intelligence, self-concept, achievement responsibility, teachers rating of pupil adjustment classroom achievement. The sample of the present study consisted of three categories of subjects, parents, teachers, and teachers 200 families of SES belonging to SC/ST community were selected randomly from the neighbouring communities in Cuttack, Puri and Dhenkanal district in Orissa. The findings of the study indicated that the most of the parents in the underprivileged homes are illiterate. They have a fairly large family to support.

Parent in underprivileged homes are fatalist and externally oriented. They have evidently low level of expectancy and low achievement orientation.

Father's educational status is sighificantly related to self-concept, adjustment, and school achievement if girls reading in the class-IV but for the entire sample of boys and girls the relationship is near zero.

Family income is positively related only to school achievement for the girls of class IX and is negatively related to achievement orientation. Life style, expectations locus of control are low because of membership in underprivileged section of the community.

Devi (1985) identified institutional constraints, home environment, and the pupil's health as blocks for achievement in school compared to caste Hindu group of children. There was no difference between the two groups but the home environment was not good as regards SC.

Several studies demonstrated that inspite of Govt. scholarships, hostel accommodation students were not able to show progress in studies. This was attributed to poor economic conditions at home. Organisational and institutional difficulties on utilising facilities and accounted for poor progress in schools. The personality pattern of SC students were compared to those of high caste students in Haryana. Their self-concept was found to be extremely week. Values and problems, indicating level of achievement of SC children were analysed and it was seen that their problems were frequent and intense and it was seen that their problems were frequent and intense and were related to academic and financial aspects. Harijans resigned to themselves to their fats. Harijan students gave more importance to fate while others attributed more to individual effort. Harijan students were afflicted by majority, withdrawal emotional stability where as others show more confidence and high self-esteem.

Emanuel (1986) found that SC children should be made aware of the exploitative structure that exists in Society. Such efforts will go a long way in promoting personal growth and social transformation in the community.

There are certain identifiable gaps - when one reviews the studies avove critically. The SC children are suffering from a number of inhibitions, discrimation, lack of operational facilities provided to them etc. and hence need to have a close look. No study has been made to know their perception of the system. Lenka (1994) analysed the perception of SC children on modernity and educational system.

Education is a process of change in value system, life style, habits, acculturation, modernity, by and large interpersonal relationhsips and adjustments. It is a slow process and still becomes slower for those who remained away from the educational fabric for centuries and even after independence for decades i.e., the Scheduled Caste, traditionally stigmatised as untouchables or Harijans. This community is the lowest in the caste hierarchy and therefore is alienated from the rest of society in terms of living and manners, faiths and meaning and remain under deprivation of one sort or another. Those significantly influence educational development of SC children. In order to ascertain their percepotion which underly rural dynamics and modernisation, the first questionnaire addressed itself to assess identified belief patterns and the second one to educational systems.

In common therefore, SC children are more superstitous, religious, respectful to parents, like education, believe in modern values, joint family living, like independent school for them, being exploited and continue to be diveded on issues like treatment by Goddess and don't want to marry in other castes and against animal worship. These are perceptions of SC children when they are drawn from both boys and girls studying in schools. They are the careers of their own group culture. Hence, their perceptions are more important and relevant.

On the other hand, they still continue to believe that they are not inferior and do not receive scholarship. They do not go to teacher's house, get no remedial help from teachers, and several others on which they have no clear cut opinion, such as : Education of parents, facilities at home, family support, no peer encouragement, However, these perceptions are quite pertinent from the point of view of educational planning for SC children.

Issues and Concerns

The issues that concern the education of SC children are many and varied. These may be familial, socio-cultural, educational, organisational, sociological and personal. But in a pluralistic and multicultural society like ours each one has a role to play.

The concern is that seldom, free incentives reach SC children at the level of schooling and most likely because of this they drop out from the system. An one window delivery system in what is needed. At higher education level the facilities are much more than what the clientele need, particularly after independence. It has been observed from several studies that they rarely complete school education to come to higher education, they take up jobs often after passing the school stage and quite a few are unaware of the facilities they are to get from Goverment sources. Hence, awareness programme is a must for them to inspire them for higher education.

The drop out figures are alarming but the explanation that is given is not poverty, nor parental indifference but social distance created by us as teachers in schools and members of society at large. The detailed analysis is given by Panda (1988).

In the field of education wastage has been determind on the basis of stagnation and drop out rate. Stagnation has been measured by counting the number of failures requiring different years from the cohort of pupils.

$$\text{Index of Stagnation} = 1 \left[\frac{\text{Total optium years}}{\text{Actual used years}}\right]$$

Drop out refers to leaving the school at a particular point of time with a desire not return. The rate is calculated in terms of original enrolment in class-I. The drop-out rate is higher for scheduled caste and scheduled tribe children as compared to normal chiildren. It is also high in rural schools than in urban schools although educational facilities are available at every 1.5 kilometer.

Safaya (1970) has identified several cause of wastage such as poverty, apathy, poor quality of teaching, poor school environment family circumstances, irregular attendance, indifferent teaching, faulty circumstances, and defective examination. Safaya (1970) has suggested that parent-teacher conference may be helpful in reducing wastage. Tiwari (1971) has traced the family dynamics of drop-outs at the primary level. He collected from school drop-outs and non-dropouts in 201 primary schools in Agra. The study revealed that familes of non-dropouts were significantly large and medium in size. Families of dropouts were economically better off than those of non-dropouts whereas parents of non-dropouts were more educated. Mothers of dropout children had the least amount of education. Husband and wives in families of non-dropout children showed greater mutual trust and affection. Parents of non-dropouts showed more acceptance and greater domination over their children. Non-dropout fathers were more trusting than non-dropout mothers. Fathers of non-dropout children were more dominating in the family. Parents of dropout children were more autocratic than those of non-dropout children. Punishment, cooperation and autocracy were more prominent in families of dropouts. Possession and trust, love and dominance were more prominent in families of non-dropouts than in those of dropout children. Similar findings were obtained in several studies (Pande, 1980). Research studies have identified a number of reasons why children leave school. It seems that when the youngster feels that he is not getting anywhere, he just drops out.

The National Council of Educational Research and Training, New Delhi has identified factors leading to educational wastage. In order of priority, the causes of wastage in primary schools are: Economic, parental indifference, social habits and customs, irregularity in attendance, admission to underaged children, and ineffective curriculum. The relative importance of causes of wastage in middle schools have also been examined and reported (Sharma and Sapra, 1971). The factors were essentially the same but two other factors, i.e., failure and lack of motivation were added as the priority causes of wastage. The causes of wastage were related to factors germance to the pupil himself, his family, the school and the community to which he belongs. The causes of wastage were related to factors germance to the pupil himself, his family, the school and the community to which he belongs. The causes of wastage were studied on the basis of an analysis of 790 dropouts 485 stayin cases from 92 schools. The results indicated that with regard to primary education the reasons of wastage and stagnation have remained constant.

Panda (1977; 1978) analysed dropouts and investigated the related teaching/learning problems (Panda, 1978). Data were obtained from school supervisors relating to 29 different aspects of school education. Irregular attendance, indiscriminate admission, irrelevant curriculum, parental indifference, inapproprate teacher preparation, single teacher schools, heterogeneity of class composition, poverty, lack of physical facilities and teacher incompetence were cited in order as the factors which contribute to drop out in the school system on the basis of a sample of 10 dropouts in rural western Orisss a and using the interview procedure, RPM and school marks, Tilak (1982), on the basis of a case study of Andhra Pradesh schools with regard to wastage, remarked that educational wastage reduced the contribution of the educational system to socio-economic growth of the economy. Mehta (1974) used motivational techniques for eliminating wastage in the school system but the results are not clear-cut. Non-formal educational strategies have been conceived as one of the many educational alternatives to reduce wastage.

An attempt has been made here to analyse the problem of wastage in education. No doubt, there is a need for rethinking and action. Participation of people in eudcation mobilization of community resources, role of human agencies, and appropriate curriculum and books for children. But action oriented research strategies and intervention for promoting universalization of education are also needed. Research has to be problem oriented. Developmental effort rather than closed from type discussions have no value.

What emerges from students perception as well as from studied the causes are :

— Lack of interest in studies because of irrelevance of curriculum.
— Lack of motivation - personal and parental.
— Lack of parental support in education.
— Lack of interest in education from peer group.
— Lack of encouragement from teachers.
— Early entry into employment market.
— Incompatibility in socio-cultural activities.
— Need for remedial classes which are not operative.
— Poverty.

But all these factors have been taken care in POA 1992 and it is only for us to implement these. The problem, dropout is more acute in the case of SC children.

Motivation

It is quite true that these students do not possess intrinsic motivation but what is of more importance is that they can not delay gratification. Therefore, in their lives more of extrinsic motivation is necessary for example, teachers must build up a positive social emotional climate and do not isolate them, do not push them back, do not become aggressive, and more so would be able to ensure attribution of self responsibility, give them a little social recognition, give them a pat on the back. This is the key to success whereas discrimination has been repeatedly ensured which is a great stumbling block.

Academic performance

Poor performance has been related to irrelevant curriculum, lack of school readiness at home, poor or limited home atmosphere physical and academic for study, lack of assistance, linguistic deficiency, no provision for remedial teaching. In fact, hardly any teaching takes place, therefore, learning has to be minimum. There is therefore a need for enjoying minimum level of learning teachers to be drawn from their own community parental awareness and provision of teacher guides who can visit such houses and help them.

— Bringing together Govt. & Non-Govt. organisations. To develop general awareness about the magnitude of the problems of U.P.E., attempts should be made for bringing co-ordination among all organisations and people in general particularly for higher enrolment and retention of SC children.

— Selection of teachers and their training.

— A selected band of teachers with spirit of dedication and vissionary zeal should be taken for equipping them with the modern technology, communication skills, child psychology and pedagogy for the pooressed.

— Development of appropriate learning materials.

— Child centered instructional materials should be developed to attract the children for varieties of teaching learning activities, particularly from the ecology of SC family background.

— Opening of more Ashram, Sevashram, H' & TW High Schools in Orissa there is sufficient evidence of higher % of pass compared to General School in 91-92 mentioned in recent trends section.

— Selection and use of appropriate media and methods.

— Radio, television, films should be specially commissioned for exposing the children to programmes like health and hygine, inventions and discoveries, social customs etc. Child magazines/journals etc. should be published and circulated.

- Flexibility in school timing.
- The teachrs in primary schools should rescheduled to suit to their engagments in formal school activities depending upon the local needs.
- Flexibility of school curriculum.

Education is conceived to be fulfilment of a state of development which can be achieved by providing in abundance such experiences and activities as will enable all the children to develop their power of expression through languages, music, painting, making things, observation, counting and use of body movements. So the curriculum should not be so much rigid. The flexibility has to be maintained by developing the curriculum in terms of the fulfilment of local needs. The teacher, keeping in mind the local requirements and the corresponding need of the child should plan the curricular activities and use the materials and media accordingly.

Sociological issue

A persistent issue that concerns the socio-metric relation with peer group is the cult of untouchability. Not only there is ethnic prejudice amongst SC vs. Non SC groups but among SC groups as well. There is a kind of paradoxical climate that has dominated intergroup relationship, acceptance and tension. In order to get rid of this, quite a number of the SC students have preferred separate schools as were evident from their perceptions (Lenka, 1994). But in order to mainstream the SC it is essential that relationship between Caste Hindu and SC are to be manipulated, planned, monitored to get gradual acceptance including community and neighbourhood roles and placements.

Education of parents

Quite natural that the parents are predominantly illiterate but they have a tradition of their own, values of their own but they do not have competence to assist their children in education either by direct help or by giving appropriate choice for specific lines.

Teachers do not extend spontaneous assistance to help SC children on their own and SC children also do not get encouraged to meet them at their places. The school climate needs more natural support, safety, acceptance and affection than routine dealings (Lenka, 1994).

Neighbourhood is a potent factor but except for an urban life neighbourhood in rural area is quite depriving and hence educationally is not a conducive atmosphere. Even the neighbourhood interactions are intra caste characters. These issues need to be thrashed out in real spirit and proper planning. Social relations in one area where they sense discrimination. Hence, they should be made more aware about the consequences of socio-economic and motivational deprivation. The schools, home and neighbourhood should emerge as a strong supporting culture of institutions to help the deprived than governmental planning.

This is also another cause responsible for poor education of scheduled caste children quite related to their economic life. Associated causes include lack of medical facilities, unhealthy surroundings, in adequate nutrition programme etc.

Among others one would notice, unavailability of communication and text books, incomplete schools, school anxiety, teacher absenteism, lack of academic supervision etc. which are being removed phase by phase.

Educational strategies

The following instructional strategies for educating the SC children are suggested considering the objectives of instructions and their entering behaviour to an instructional situation. Basically there is no difference in the way in which the SC children learn. Their learning process are subject to the same general principles of learning but with a difference in rate, sequence, type of materials and presentation modes. There is a need therefore, for :

(a) A continuous appraisal of progress and comprehensive measure of assessment with a feedback system should become a part of every teaching process.

(b) These students are to be simultaneously trained to achieve knowledge, skills and attitudes.

(c) Since the students come to the school with perceptual and intellectual deficiency an hour may be kept aside for teaching of language, training in how to increase some of their non-intellective chracteristics i.e., self-concept level of aspiration, n-ach, sence of responsibility etc.

(d) Learning of concepts and ideas may be sequenced before they are presented to the SC group, using more of concrete and life like situations.

(e) Training for analytic thinking may also constitute a part of the instructional programme design.

(f) Instructions must be given to children how to place performance according to their ability. The teacher has to ascertain the prerequisities before instructing them to move the next step, and make provision for initial success experiences.

(g) For educating the SC children giving recognition, responsibility tangible rewards, positive affective remarks are to be encouraged in schools.

(h) They also need to be acculturate through sensitivity training, exposure to literature, discussions and group contacts, role playing and case conferences.

(i) Self-instructional materials may be used to their advantage.

(j) The curriculum should have direct bearing on their life and work.

No single device will suffice to counteract or to remedy the complex factors, those are associated with the education of the scheduled caste. Administratively the problems can also be taken care of by dealing with acculturation problems and school learning by providing early school experience to these children and following an ungraded sequene or multiple entry system. To unlock the hidden potential among these children, a radical change in curriculum and teaching is required.

In a nutshell it is possible to conceive of education as a countervailing force to overcome the deficits accumulated in SC groups. It is true that it is not the educators function only to reverse the negative impacts of educational deprivation, social and effective insulation, caste discrimination and economic deprivation. It involves all aspects of the community. The task surely calls for creative innovation all along the line. The crucial pedagogical problem involved is that of understanding the mechanism of learning facility and learning disfunction and applying this knowledge to optimum development of a heterogenous population characterised by differential backgrounds, opportunities and patterns of social and intellectual abilities.

Research studies support certain measures : (a) Early modeling and imitation of desirable behaviour; (b) Language enrichment programme and stimulation at home; (c) Affective attention and acceptance by parents, peers and teachers; (d) Providing initial success experience to build better motivation and striving for success; (e) Removal of discrimination attitudes on the part of teachers and other members of society; (f) Humanistic approach to teaching the SC in school; (g) Instructional programmes may be geared to their need and ability level; (h) Giving responsiblity, recognition, tangible rewards, positive remarks etc; (i) Exposure to sensitivity training, exposure to literature, discussion and group contacts, role playing case conference relating to their problems.

Special assistance

SC children will overcome the handicaps of poverty in rural and as well as urban areas seems to be relate as to how effectively the school faculty assist them. In fact, individuality can be fostered and realised through effective guidance service and the establishment and development of these services in schoools. Particularly in the Sevasharams and Ashram schools and High Schools run by the Harijan and Tribal Welfare Department.

The characteristics of the rural cmmunity further inhibit the learning of new behaviour for coping with urban living or modern life. It is the special task of even of part-time counsellors and teachers to enable students to discover how they can experience more control over cheir life choices.

Of course, one would raise a question that guidance service has not been included as a part of the school system. But nothing prevents the system to equip with the technique of guidance and counselling activities as a part of the inservice training particularly those who are teaching SC children whose parents are illiterate and rural based and are therefore, neither capable nor motivated to deal with education of their own children.

Considering from all points of view, guidance activities for the SC may be organised in small groups of eight to twelve. The information giving, task orientation and counselling type of activities will be more effective in small groups for the SC because they will not be inhabited before an adult authority as it true of any individual counselling situation. Role playing as a technique is most suitable for guiding the activities of the SC. Further, for helping the rural SC guidance service, programme needs be extended through parental counselling, community resources clubs, and referral to a counsellor would be available at least in each school complex.

Research directions

Research studies with SC children may take essentially a few specific directions with different objectives in mind. Education of SC children should be viewed as a sector of development. Research must consider the process through which educational change can take place in accelerating school achievement and simultaneously reducing constraints. There may be studies to assess awareness and utilisation of facilities, first generation learners, wastage and stagnation, acceptance of urbanisation by SC, impact of Governmental measure and social mobility among SC.

A large body of literature deals with trainability of intellectual function and reversibility of early deprivation which in fact, was the concern since a long time. There is little research to support that intellectual functions continues to permeate into adult periods of life and compensatory programmes are myth. While this may be true largely, it is possible to accelerate the educational achievement of the SC if we attack the issue from a more affective and inter-personal relationship angle. In fact, all learning occur in an emotional climate and this is more so far the deprived. Affective processess are more manipulable than cognitive processess, use of social reinforcement, giving attention and approval building, positive expectatancies through initial success, elaborative comments and praise, non-verbal attention through a smile, do in fact improve cognitive performance. To what extent these observations are applicable for the scheduled caste children?

Of course, in our society segregated classrooms are not available for SC children to a large extent but there are schools in rural areas which represents the ecology of a special school. Ashram schools and school where minority group children are few in a regular school. In such schools, the teachers do hold stigmas and try to have their self-fulfilling prophecies achieved.

Teacher's behaviour that are warm, permissive and encouraging can attract underprivileged to the school. The whole educational process has to be humanised and building up of interpersonal relationship can effectively contribute to academic exchange and improvement. Teachers can made a difference in the life of the pupils and more so in the life of the underprivileged. We have to engineer what this difference ought to be in our policy, planning and implementation of an educational programme.

Do teachers need a specialised training?

Teacher education is the most neglected field with regard to any specific target group. So far, in the whole of the country, the traditional teacher training programme is going on whether it is at JBT/CT level or at B.Ed. level. By and large these are related to general teacher preparation for the normal school system.

There has been special training of in service nature for teachers of SC/ST. What is more important is a kind of specialised training through DIETs, for the elementary school teachers on how to deal with SC children effectively, motivate SC children and enhance their aspiration level use of remedial teaching for these children, change in curriculum materials and drawing these from their ecologywithin the natural framework, make formative asessment and guide them at right time, make school climate conducive for learning and make them at home, allow peer group acceptance through delibrate mainpulation and social reinforcement.

Teachers working in Ashram schools Sevashrams and Harijan and Tribal Welfare Schools need be highly skilled with thoughts and problems of education of SC children. This will not only reduce wastage, stagnation but will improve the system of education of SC children and bring them into mainstream of life. Teachers should realise that they are the principal means for implementation of educational programmes. The training curriculum should enable them to acknowledge the importance of universalisation of elementary education and recognise the worth of their contribution to achieve it. Enhance their image and selfconfidence as teachers which has a direct bearing on the quality of education; Ensure that every child is enrolled, retained and acquires the mimmum level of learning; possessing a clear concept of universalisation of elementary education; prepare household education/status card of the feeder villages through micro planning to know the educational topography and demongraphy of the area; ensure family-wise and child-wise design of action by which every child regularly attends schools contines his/her education and completes at least five years of school; develop harmonious interaction with the community around mobilising community involvement for regular participation of all children in primary education; Create a conducive environment by maintaining a clean school for motivation and retention of the children; plan for improvement of schools with local participation so that effective learning takes place; emphasize child-centred approach, introducing joy, fun, exploration as integral part of learning and making his own teaching interesting, relevant and effective; establish cordial relation between the students and himself by remembering their names and understanding their needs, interests and diverse background; establish communication with parents and motivating them to realise they value of education through home visits; identify children according to their proficiency in different subjects (high, medium and low) and organising special coaching for low ability pupils for enrichment and remediation; organise co-curricular activities-intter-class activities like quiz, songs, games, role-play, painting, writing, recitation competition etc. to wipe out monotony among children; implement child-to-child based approach by actively involving senior students in providing care for the juniors for ensuring regular attendance and educational guidance; enlist the support of the local retired educated persons and utilising their support in environment building programme; activise school complex and lead school programmes for provision of academic input and make village education committee operational and functional through frequent meeting and discussions.

Highlights

Education fo Scheduled Caste children is a post independent phenomenon. These children have a culture unique to their own with a long past and genesis. The evolutionary history of Scheduled Caste tells a systematic growth of asserting their rights. Although literacy rate is low, drop out rate is high, enrolment in professional institutions are disproportionately small, evidences indicate a consistent rise in all aspects of education. Marked by progressive decline in mental ability, cumulative deficits and premature school termination, these children can be brought to the mainstream by well designed interventions for developing learning and information processing, improving their selfconcept and sense of responsibility and reducing anxiety. At the same time, various incentive schemes and welfare schemes would prove useful in the educational development of the SC Children. Issue and concerns range from motivation, academic performance, sociometric relation, parental education to long term built in educational intervenion programmes and planned instruction based on sub-group culture initially and normative culture there after.

REFERENCES

Agarwal, V. and Srivastava, A. (1986). Self-concept and level of aspiration of Harijan students. Lucknow University. (Personal communication).

Ambedkar, B.R. (1962). The untouchables: Who were they and why they become untouchables, Arya Books, New Delhi.

Bansal, J.P. (1973). A study of adjustment difference among the scheduled caste and high caste Hindu adolescents. Educational and Psychological Research Journal, 1, 39-41.

Birch, H.G. and Belmont, L. (1974). Auditory and visual integration among retarded readers, American Journal of Ortho Psychiatry. 36, 852-861.

Das, U. and Panda, K.C. (1977). Effects of Certain Non-intellective Variables on Cognitive Performance (Mimeo).

Desal, H.G. and Uchat, D.A. (1981). Self-concept of Harijan students and students and attitudes of other students towards them. Indian Educational Review, 16, 44-50.

Devi, Rajpate, (1985). Barriers in Primary Education of Scheduled Caste Students, Ph.D. Education, BHU.

Dube, S. and Sachdeva, P.S. (1983). Appraisal studies of adult education programme, Indian Journal of Adult Education, 42, 19-24.

Emmanuel, S. (1986). A programme for changing, the awareness of social realities among the scheduled caste in Orissa, Ph.D. Educ MSU.

Lenka, N. (1994). Development of education of Scheduled Caste in Orissa since Independence, Ph.D. Thesis, Utkal University.

Mahapatra, M.M. (1964-65). Organisation of caste among the Bauris of Bhubaneswar, Adivasi, 3, 46-53.

Mahapatra, M.M. (1978). Bauri of Bhubaneswar, THRTI, Bhubaneswar.

Mandal, laum, D.G. (1973). The study of life history of Gandhi, Current Anthropology, 14, No. 3, 177-196.

Mehta, A. (1974). Institutional Climate as a sector of staff morale and student control ideology in the affiliated colleges of Gujarat, Ph.D. CASE, MSU.

Mishra, A.M.; Srivastava, R.I. and Tiwari, N. (1980). Inter Caste Difference in Ration Among Girls and Scheduled Non-Scheduled Caste. Journal of the Institute of Educational Research, 4, 13-15.

Nandy, S. and Singhal, S. (1981). Motivational Context of Educational Achievement among the poor. Indian Journal of Applied Psychology, 18, 36-46.

Panda, K.C. (1977). Problems of tribal education : Some emerging patterns and strategies for change. In D. Panda (Ed.), Tribal problems of today and tommorow, Calcutta, Modern Book Depot.

Panda, K.C. (1978). School Education. Third Education Survey, Orissa.

Panda, K.C. (1988). Social Psychology of Education, In Psychology. The state of Art, Vol. -II, J. Pandey (Ed.), New Delhi. Sage Publications.

Panda, K.C. and Das, J.P. (1970). Acquisition & reverssal in four sub-cultural groups generated by caste and class, Canadian Journal of Behavioural Science, 2, 267-273.

Panda, M.D. (1982). The relationship of parental life style to intellectual achievement responsibility adjustment and cognitive performance among under-privileged children, Ph.D. (Psy.) Utkal.

Pande, N. (1980). Irregular attendance at school : Climate support for SC students. Social Change. 10, 19-22.

Perlukar, R.V. (1953). Selection from Records of the Government of Bombay, part-I, Bombay, Asia Publishing House, P. 183.

Rath, R. (1973). Teaching and Learning Problem of Primary school Children. A Challenge to the Psycholigiste and Educationists (Mimeo).

Rath, R.; Dash, A.S. and Dash, U. (1979). Cognitive ability and school, Dash, U.N. achievement of socially disadvantaged children in the Primary Schools, Bombay; Allied Publishers. Report of the Backward classes Commission Kaka Saheb Kalikar, (1956), New Delhi, Manager of Publication.

Safaya, R.N. (1970). Stagnation and Westage., Educational Review, 76, 217-220.

Sharma, R.C. & Sapra, C.L. (1971). Wastage and Stagnation in Primary and Middle Schools in India, NCERT, New Delhi.

Srinivas, M.N. (1966). Social change in modern India. Allied, Bombay. Statewise information on education of scheduled caste and scheduled tribes, 1985, Ministry of Education, SC & ST Cell, Government of India.

Tilak, J.B. (1982). Wastage in equcation in India. A case study of Andhra Pradesh, Indian Educational Review, 17, 58-85.

Tiwari, G.P. (1971). Family dynamics of drop-outs at the Primary Level, Ph.D., Agra University.

Tripathi, K.C. (1968-69). A Genetic Survey among the Bhois of Bhubaneswar, Adivasi, 1, 77-89.

Tripathi, K.M. and Misra, G. (1975). cognitive Activities as a function of prolonged deprivation, Psychological Studies, 20, 54-61.

10

SCHEDULED TRIBE CHILDREN: Characteristics, Issues and Educational concerns

Focus points

Why do Scheduled Tribe children face problems for education? Are these related to Alineated curriculum from their culture, isolation, lack of relevance to life? What behavioural characteristics do they display? What are the constraints? What are the innovations? Where does one move? These questions sound amusing but research reveal uniqueness in tribal sub-culture and their taste for education.

Scheduled tribes: State of art

Education of Scheduled Tribe children is a major concern in our society. Development programme during the post independence period has been guided by national goals and aspirations embodied in the Indian Constitution. National Policy on Education, 1986 emphasized 'Education of Scheduled Tribe children' among others. This was reiterated in 1992 revised version of policy and programme of Action. It has been made clear "that free and compulsory education of satisfactory quality is provided to all children upto 14 years of age before we enter the 21st century". A review of the progress of Scheduled Tribe children in Orissa, in terms of characteristics, analysis of issues and future perspectives seem, therefore, warranted.

Demography, literacy and facilities

Scheduled Tribe constitutes a sizable proportion of the population of the century and an important segment of our social fabric. They not only represent different ethnological groups but belong to disparate levels of socio-economic development. They have an unique evolutional history in terms of clustering and concentration as well as social-physical isolation spread over ages. The tribal communities have a culture of their own which varies among tribal groups having symbiotic relationship with ecological conditions. There has been a steady increase in the interest of education of tribals in a manner through various programmes and policies from a nearly zero base at the time of independence.

The scheduled tribes are also listed in each State/Union Territery separately under the Presidential Order "The Scheduled Castes and Scheduled Tribes Lists" as amended from time to time. No Scheduled Tribe has been listed in Haryana, Punjab, Chandigarh, Delhi and Pondicherry as per this Presidential Order.

67.76 million persons were counted in 1991 Census belonging to Scheduled Tribes in different States/UTs in India, excluding Jammu & Kashmir, constitution 8.08 per cent of the total population. The percentage of Scheduled Tribes has marginally increased from 7.83 percent in 1981 to 7.95 per cent in 1991. TheScheduled Tribes population has increased by 25.67 per cent during the decade 1981-1991. This growth rate is more than the growth of the total population of the country (23.79 per cent).

In some of the States and Union Territories, the population was predominantly Scheduled Tribes. For example, in Mizoram 94.75 per cent of the total population belongs to Scheduled Tribes. The other States/Union Territories with predominantly Scheduled Tribes population were : Laksha-dweep (93.15 per cent), Nagaland (87.70), Meghalaya (85.53), Dadra Nagar Haveli (79.99) and Arunachal Pradesh (63.66). Manipur and Tripura also had substantial proportion of population as Scheduled Tribes, the respective proportion being 34.41 and 30.95 per cent. Among the 15 major States, Madhya Pradesh had the largest proportion of Scheduled Tribe population (23.27 per cent) followed by Orissa (22.21). Gujarat, Assam and Rajasthan were the other three major states in which more than 10 percent of the population belonged to Scheduled Tribes, the respective percentage being 14.92, 12.82 and 12.44.

Only 7.39 percent of the Scheduled Tribes population of

India live in urban areas as compared to 25.73 per cent of the general population and 18.72 per cent of the Scheduled Caste population living in the urban areas. Thus, roughly 93 percent of the Scheduled Tribes population are rural based. Of the 15 major States, only 3 states, namely, Karnataka, Maharashtra and Tamil Nadu had more than 10 percent of their Scheduled Tribes population living in the urban areas : the respective percentages being 14.94, 12.47 and 12.01. The percentage of Scheduled Tribe population living in urban areas in other major States are : Andhra Pradesh (7.6), Assam (3.4), Bihar (7.0), Gujarat (8.1), Kerala (3.5), Madhya Pradesh (4.8), Orissa (5.1), Rajasthan (4.6), Uttar Pradesh (5.9) and West Bengal (5.2).

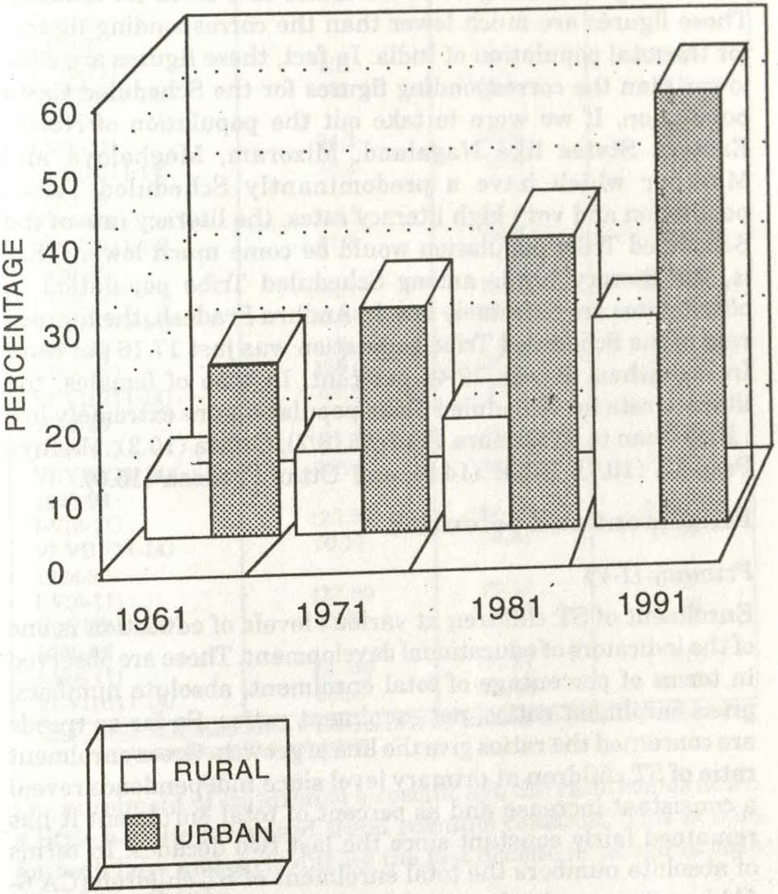

Fig 2. Literacy Rates of Scheduled Tribes (1961-1991)

The children in the age group of 0-6 constitute 20.18 percent of the Scheduled Tribe population in India as against 17.94 per cent for the total population and 19.63 per cent for the Scheduled Caste population. Thus, the Scheduled Tribes population had a relatively higher population of children than the general population as well as Scheduled Tribe population. This is much more favourable to women than the sex ratio among the total population (927) or the Scheduled Caste population (922). 29.6 per cent of the Scheduled Tribe population in the age group 7 years and above is found to be literate as per the 1991 census; the literary rate being 40.56 for males and 18.19 for females. These figures are much lower than the corresponding figures for the total population of India. In fact, these figures are even lower than the corresponding figures for the Scheduled Caste population. If we were to take out the population of North-Eastern States like Nagaland, Mizoram, Meghalaya and Manipur which have a predominantly Scheduled Tribes population and very high literacy rates, the literacy rate of the Scheduled Tribe population would be come much lower. That is, the literacy levels among Scheduled Tribe population in other states are extremely low. In Andhra Pradesh, the literacy rate of the Scheduled Tribe population was just 17.16 per cent. In Rajasthan, it was 19.44 per cent. In case of females, the literacy rate for Scheduled Tribe population are extremely low : Rajasthan (4.4), Andhra Pradesh (8.7), Orissa (10.2), Madhya Pradesh (10.7), Bihar (14.8), and Uttar Pradesh (15.0).

Enrolment and retention

Primary (I-V)

Enrolment of ST children at various levels of education is one of the indicators of educational development. These are observed in terms of percentage of total enrolment, absolute numbers, gross enrolment ratios, net enrolment ratios. So far as trends are concerned the ratios give the line of growth. Gross enrolment ratio of ST children at primary level since independence reveal a consistant increase and as percent of total enrolment it has remained fairly constant since the last two decades. In terms of absolute numbers the total enrolment of ST children (CA 6-11) in primary schools were 8032918 in 1991-92 as compared to 46, 26, 816 in 1981. The population of ST has slighly increased over the two periods (51, 629000 (1981), 67758000 (1991) there is 100% increase in the total enrolment position of ST children at primary school. Gross enrolment ratio indicate enrolment position with reference to child population of a specific age with over age and under age admissions gives a clear picture. At Primary Level GER was 53.1 in 1971; 70.0 in 1981; 103.35 in 1991; and 104.7 in 1992. The Gross Enrolment Ratio are given in Table 10.1. There is a systematic progression towards high enrolment of ST children over the years. If one looks at NER

Table 10.1: Gross enrolment of Scheduled Tribes in Elementary Education.

Class and Age	*Boys*	*Girls*	*Total*
Group			
1970-71			
I-V(6-11)	NA	NA	53.1
VI-VIII(11-14)	NA	NA	13.8
1980-81			
I-V(6-11)	94.2	45.9	70.0
VI-VIII(11-14)	28.2	10.8	19.5
1985-86			
I-V(6-11)	113.2	68.8	91.6
VI-VIII(11-14)	41.3	19.2	30.6
1990-91			
I-V(6-11)	126.78	78.60	103.35
VI-VIII(11-14)	51.33	27.50	39.72
1991-92			
I-V(6-11)	125.6	82.6	104.7
VI-VIII(11-14)	54.1	27.3	42.30
1992-93			
I-V(6-11)	127.99	92.18	110.58
VI-VIII(11-14)	75.07	44.04	59.97
1993-94			
I-V(6-11)	123.90	88.80	106.97
VI-VIII(11-14)	60.17	34.91	47.99
1994-95			
I-V(6-11)	127.80	90.17	109.50
VI-VIII(11-14)	60.32	34.47	47.76
1995-96			
I-V(6-11)	129.96	94.87	113.03
VI-VIII(11-14)	60.67	37.05	49.20

Note : Gross Enrolment Ratio = Enrolment of ST students on Rolls /Population of ST in the corresponding age group.

i.e., enrolment of children of a specific age the ratio comes down a little but the increased trend remains constant. This is true for both boys and girls during the last decade although in case of girls is at 2:1.

An index of UEE is not known from mere enrolment in

Class-I but from retention over the years. ST children have shown relatively increased retention in the system during the 80's and 90's compared to earlier period even though the percentage of retention is still very low at primary stage. The drop out figures are given in Table 10.2.

Table 10.2: Drop out rates (Scheduled Tribe)

Year	*Primary (I-V)*	*Upper Primary (VI-VIII)*
1980-81	75.66	86.71
1981-82	74.00	84.99
1982-83	72.44	83.35
1983-84	70.63	83.74
1984-85	69.40	82.86
1985-86	65.56	81.86
1986-87	66.12	80.19
1987-88	65.21	80.01
1988-89	64.53	78.08

Breakup of Drop Out Rates (1988-89) Scheduled Caste

	Boys	*Girls*	*Total*
1988-89			
I-V	61.94	68.73	64.53
I-VIII	76.21	81.45	78.08
I-X	84.87	89.91	86.72

Upper primary level (VI-VIII)

In case of upper primary level the enrolment figures have increased 150 times from 714062 (80-81) to 1794424 (91-92) approximately in terms of numbers. But as percent of total enrolment route happens to be 2:1 at CA 11-14 level which was also maintained at the Primary Level. The enrolment position is given in Table-5. This gives a fairly steady increase over the years even though the picture is not very much encouraging. The GER in 70-71 was 13.8; in 1981 it was 19.5; in 1991 it was 39.72 and 42.30 in 1992. The drop out rate in class-VIII in 88-89 which alarming.

Secondary schools (CA 15 + IX-X) + (XI-XII)

Enrolment of ST children in Secondary School since 1980-81 indicate two fold increase in absolute numbers 318111 (80-81) to 640837 (91-92) and this constitute a stable percentage of total enrolment. The drop out rate in Class X is given in which is 86.72 in 1988-89.

Certain general observation can be made at this stage. The proportion of enrolment of ST children continues to be much less than their population proportion except in the case of Primary education where enrolment ratios are comparable to general enrolment. Drop out rate of ST children continues to be very high at all levels. Enrolment ratio in respect of ST girls are at a lower level compared to ST ratio in respect of ST girls are at a lower level compared to ST boys and the rate of increase from year to year is also very slow.

Higher education and professional education

An observation of enrolment figures in higher education, professional education, Teacher education indicate a steady increase in enrolment for doctoral degrees, higher enrolment in MA., M.Sc., M.Com., B.Sc.(H), B.A.(H), B.Com.(H), Engineering, Teacher Training and other areas as given in Table 10.3. The number of Girls have also increased over the years in these courses (Selected Educational Statistics, MHRD, Govt. of India). The percentage of enrolment to total overall enrolment is less than two (Table 10.3).

Characteristics of tribal children

Practically, there is no research study on Tribal Children prior to 1970. One can look at researches after 1970 essentially from two points (i) educability of S.T. children in terms of Psycho-educational predispositions and (ii) effects of education, schooling and intervention to develop the characteristics in a systematic way.

Large scale failure of tribal children has been attributed to poor intellectual abilities. Studies on intelligence testing are equivocal but a bulk of evidence go to say that tribal children do have low intelligence compared to normal children (Panda, K.C. 1988, 1991, 1992, 1993; Rout, 1989). Whereas there are studies to the countrary supporting Higher IQ in tribal children (Das, Patnaik & Das, 1978; Rath & Das, 1972; Rath, 1974).

S.T. children have poor ability to concept acquisition and comprehension (Das, Patnaik & Das, 1978; Rath & Das, 1972); poor scientific, abstract, literary reasoning (Rath & Das, 1972) poor attention and perceptual skills required for school success (Whiteman & Deutsch, 1968). They display low linguistic proficiency (Das, 1983; Das, Patnaik & Das, 1978; Patnaik,

Table 10.3 : Schedule Tribe students studying at different levels in colleges and universities (All India Figure)

Courses	*86-87*	*87-88*	*88-89*	*89-90*	*90-91*	*91-92*	*92-93*	*93-94*	*94-95*	*95-96*
Ph. D/Dil/D. Phil.	644	812	914	700	751	938	945	1214	1387	1514
Ph.D./Dil/D.Phil	153	170	187	266	219	250	238	281	382	445
M.A.	2867	3918	4009	4844	6127	6104	5688	6019	7870	9095
M.Sc.	384	523	565	516	635	722	682	915	1238	1367
M.Com.	1531	858	885	1103	1467	1518	1357	1462	1514	1799
B.A.(Hon)/B.A.	25910	36982	42108	45673	53041	61570	65115	83485	1011063	113088
B.Sc.(Hon)/B.Sc.	4530	5222	5351	5921	6919	7714	9481	10759	12331	14384
B.Com.(Hon)/B.Com	9305	11002	9308	11213	12373	13920	13328	14338	15883	17574
B.E./B.Sc.Eng./B.Arch.	1812	2535	2711	2555	2591	2625	3639	4119	5469	5658
B.Ed./B.T.	1841	1733	1944	2104	2120	2294	2433	2958	3576	4383
M.B.B.S.	1750	2020	2101	2185	2246	2179	1896	2718	2773	2989
Inter	17716	12641	14206	25783	25784	25055	121347	76638	122179	238787
Pre-degree	7770	18305	16244	17271	20178	29242	—	—	—	—
Teacher Training	4944	6288	7482	6565	9315	10158	10369	10567	10595	9044
Poly-technique	2720	5346	5715	5264	5549	7212	8837	9920	11119	11872
Industrial Crafts	9614	12220	12911	16955	19538	20729	17166	18069	17720	17146
10 + 2	120237	114149	125763	130635	145960	147158	153438	183812	189735	238787

Source : Selected Education Statistics M.H.R.D. (10 year period)

1984); low achievement motivation (Das Patnaik & Das, 1978) essentially in failure situations (Panda, R. 1991).

There is greater goal discrepancy in aspiration and achievement among ST primary children (Nayak, 1991) which is more in case of tribal girls. One observes, inadequate sensory stimalation and poor communication ability (Das, Patnaik & Das, 1978); Greater reflectivity (Das, 1989). Short span of attention in Tribal children (Das, 1984) including poor in simultaneous processing of information (Das, 1984, Panda, R. 1991). They show a feeling of insecurity (Panda, R. 1991), belief in fate control (Dani, 1978; Panda & Dani 1977) and are poor in school achievement and are impulsive (Panda and Parida, 1977).

These children have heightened anxiety (Mohanty, 1984; Panda & Panda, 1977; Panda, S. 1978) especially in case of the girls situational anxiety is more. Positive social attitudes are observed in case of mentally healthy Juangs (Panda & Mahanta, 1980). Progressive educational decline in intellectual functioning in the absence of commulative deficits in the absence of remedial instruction and programme, premature school termination and high drop out rates (Panda, 1993) are pronounced in ST children.

Teacher expetancy or pygmalion effect manifested through discrimination in educational institutions is responsible for intellectual poverty and poor achievement and evaluation (Panda, 1993). However, education and schooling have increased the social responsiveness and adaptability of tribal children in elementary schools including increased intelligence and cognitive functioning (Das, 1987); cognitive development in terms of concept acquisition e.g., mass, number, area, volume (Padhy, 1986) and logical thinking using at home controls. Anxiety proneness has significantly decreased in case of tribal elementary school children through success stories, success experiences and persusive school atmosphere (Mohanty, 1984). With increase in the age and education there is development in simultaneous processing habits of ST children which accounts for better school learning (Das, 1984)..

Achievement motivation also increased with education and intervention irrespective of sex (Nayak, 1991). Education has positively contributed to development positive self concept, realistic perception of society, rejection of violence as an instrument of social change, increased morality and social values among tribal women (Panda, & Panda, 1986). A little persussive atmosphere in Higher SES Santhal homes resulted in better school achievement. In such cases, low parental anxiety discipline, high motivation and care have produced better achievement of children compared to those of low SES Santhal homes (Santra, 1990). ST children with such parental back ground stay in school. With increase in educational level, there is also an increase in the positive self concept, intelligence and achievement orientation among Santal children (Das Gupta 1963, 1964; Santra, 1990). Planned change failed to produce increased mental health among Juangs because fear of being alieneted but did result in greater achievement motivation, culture change decreased meureticism anxiety and insecurity (Mahanta, 1970). Das (1993) has very clearly demostrated the role of cognitive and affective intervention programme in accelerating creativity, cognitive processing and school achievement of Tribal Elementary School Children.

Research trends in tribal education

In general, recent studies show that Tribal children are more aware of the importance of education and its benefits, educational facilities meant for them, but they do still have a fear for occupational and social mobility. They do infact desire teachers from their own community and own village school. The culture of their home is much traditional, permissive, intelligent an against school culture that emphasises conformity, rules, discipline and individual achievement oriented. This culture conflict have to be resolved and are often responsible for ineffective learning. Utilisation of facilities are unevenly distributed.

Wastage was a common phenomana but the percentage of wastage in Ashram schools and/or residential schools is much less than day schools. Further, wastage and drop outs are related is different tribal groups and socio-economic level. Lack of role models, early marriage, lack of a awareness, cultural reasons i.e., free nature, socialisation pattern do account for a great variation in wastage index. Non-tribal teacher, prejudices, indifference towards tribal children do contribute to poor teaching learning interaction. Teacher absenteism is another crucial factor.

Even research evidence show that tribal childrens' performance show better performance when they study in residential schools than non-tribal students in illequipped govt schools.

Psychoeducational studies have been reported under characteristics of Tribal Children

Constraints in tribal education

Slow progress of education among the tribals is due to indequate provision of schools in these communities, lack of minimum equipment, indifference of teachers, single teacher schools, poor motivation on the part of parents and children, unqualified and untrained teachers, poor economic conditions, anxiety about examination, feeling of insecurity, lack of study place and atmosphere in home (Behera, 1986; Ekka, 1973; Mohapatra, 1984: Panda, S.C. 1989; Kundu 1984; Rabindranath 1980-81; Shaw, 1960; Vyas, 1953, 1963). Besides these, high pupil-teacher ratio, improper evaluation, lack of entry behaviour, irregular attendance, teacher absenteeism have also been found as major constraints in tribal education (Mohanty, 1966-67; Mohapatra & Panda, 1980; Panda, K.C. 1977a, b; Panda, S.C., 1984, 85; Panda & Panda, 1987; Rabindranath, 1982-83).

Quite significantly, prejudicial attitude of tribals towards non-tribals also get fused to school leading to lack of identification with non-tribals teachers and hence poor learning and increase in social distance (Panda, 1993). It is true that facilities for ST children has increased over the years but school climate has not changed; fixed hours of schooling have remained; discrimination still has a major role; and apathy of planning in getting into real educational process intervention is glorified. These unfavourable educational ecology including stigma of the ethnicity penetrates slowly but surely in a negative way in determining educational decline. Statistical boosts are only artifacts of planning without resulting in change within the individual which would pave the way for mainstreaming the tribals (Panda, 1974; Panda, 1977a,b).

Lack of school readiness in terms of cognitive and effective demands are potent barriers. There is no hidden curriculum practically in a tribal home that would enhance communication process, achievement striving behaviour and develop self-concept and intrinsic motivation (Misra, 1975-81; Panda, K.C. 1991; Panda, R. 1991). Since school places high premium on these abilities, much of real learning in terms of minimum competencies do not take place among Tribal Children. There is a need for pre-school intervention through well designed enrichment and compensatory programmes to be worked through Anganwadis, Balwadies and these are to be integrated in the existing infrastructure of schooling.

Educating for ST children is not imparted initially in mother tongue and essentially following the same curriculum which is not anchored in tribal culture, environment and life. Hence, sudden switch over to standard curriculum and language becomes major constraint. These often lead to culture conflict and hence no or poor learning. Capitalising on oral traditions, skills, language and values in early years of schooling of tribals would obviously provide a smooth transition to and adoption of dominant culture of the day (Das, 1967-68; Panda, 1993).

Innovations in Tribal Education

The State Government in H.W./T.W. Department have laid stress on rapid spread of education among ST through opening of residential schools. Sevashrams, Ashram Schools and by giving them prematric stipend, free garments, books, reading materials, medicines, games and sports materials. For example, in Orissa, from 40 Sevashrams in 1947-48 and 100 more in 1948-49 the number has come now to 1032 Sevashrams, 106 residential Sevashrams at the primary stages; 73 Ashram Schools and 29 Kanyashrams at the Middle School (VI-VIII) stages; 172 Boys High Schools and 40 Girls' High Schools. Except Sevashrams, residence is provided in all other schools to the students. Further, in 1286 Gram Panchayats existing in Tribal Subplan area 1286 primary school hostels have been established to check the drop out rate at primary stage. Merits of Ashram Schools have been established (Dave, 1954; Mishra, 1959; Shaw, 1959a,b).

Administration and supervision in these institutions are taken up by Collector, D.W.Os, Director of Education and Specific inpsectoral staff recruited for the purpose. Inspection of each school and improvement of the educational standards have been ensured.

Besides these, 7 special Adivasi Hostels in Bhubaneswar, and one at Rourkela have been constructed to accommodate tribal studens in schools and colleges at the urban centres over and above the hostels make available by the Education Department (1340 upto 92-93).

The results indicating achievement of ST students of Secondary School revealed higher pass percentage (65.8% in 1922) in tribal schools compared to the performance of ST students in General Schools (36.3% in 1992) which were respectively 43 and 20 respectively in 1985. Hence, special schools did produce better achievement for tribals but the question of their mainstreaming is a point of reflection. The curriculum in these schools were same as that of general schools.

In the 8th plan (1992-97) certain Centrally Sponsored schemes have also been introduced to enable ST children to come to mainstream in the form pre and post matric Scholarships, Coaching facilities, scholarships to indigenous families etc. The State has pre-examination training centre for Civil Service Examinations and Clerical Grades for tribal students in different states. Post Literacy Centres are being introduced for adult neoliterates especially Tribal women. Significant improvement in retention of students in school system is predominantly related to implementation of programme such as : Integrated Tribal Development Project, Integrated Rural Development Project, Economic rehabilitation of Rural Poor, National Rural Employment Programme and Integrated Child Development Service which are recent innovations.

Educational concerns : Where from now?

There are certain basic assumptions for thinking and poviding a perspective for planning the education of tribals.

- Tribal children like all other children are resilent and malleable.
- Behaviour characteristics as product of learning experiences can be changed and manipulated.
- Changes can be built into the existing infrastructure and practice than creating a system.
- Tribal children will profit more from the innovative steps and the concept of equality of educational opportunity in education in terms of access, retention and success will be meaningful and attainable.

Tribal children need to be given language exercises through play, and exploring the environment, maintaining social interactions in family and school preferably during preschool years and centres. Structured programme can be built into the elementary school years. They can be helped for realistic goal setting, increasing achievement motivation, reduction of anxiety and insecurity, developing cognitive and perceptual skills, personal controls and self-esteem which are the prerequisites of educational growth, especially when minimal needs are satisfied i.e., food, clothing, shelter and schooling facilities. These interventions with the emergence of ECCE can be developed and used in integrated manner by allocating certain constant hours in a school day. Once readiness is increased, its multiplier effect in tuning access, retention and success will flow naturally. Hard to believe but sure to succeed. Research has shown ample evidence (Panda, K.C. 1974; 1988; 1991; 1993) to this end.

Teachers are to be drawn from tribal population and are to be trained to deal with tribal children with more permissive, creative, flexible and motivational approaches. Existing teachers need reorientation through inservice training. While accepting the logic of identification and introjection well with tribal teachers, rooms should not be closed for nontribal teachers to enter into the stream knowing the tribal language and culture. This would break the isolation and segregating influences leading to persistence of prejudices and therefore eventually negative out group relations based on ethncity. Problem with us is that when we become interested in tribal education, we impose our discipline. The field requires electicism and multiplicity of thinking than egoistic reflections, **"I believe so"** attitude. Most of our educational planning for tribal education have been sporadic outbursts of certain waves, political, or otherwise, but hardly has an empirical base. Holding power of the schools to cope with increased tribal children population and their diversities has also to increase tribal children population and their diversities has also to increase (Panda, S.C. 1987, 1992; Srivastav, 1966, 1967; Srivastav *et al.* 1971).

The National Curriculum framework has been on the floor but there is a need to make curriculum of tribal children in the first 3 years of schooling more related to their socio-economic life, and styles, the activities in which they are normally engaged in : forestry, culture, dance, and rituals with flexible time scheduling as NFES and gradually shifting to modern society and its contents after Class III (Mahapatra, 1967; Vyas, 1957). Cultural identities of tribals are to be refelcted in the curriculum. 'Learning to learn' has to be cultivated in a natural way than by prescriptive measures emerging from an ivory tower of planning. Block and village level of planning is essential. Evaluation should be informal, observational, and continuous with immediate concrete feedback and remedial measures leading to summative outcomes on a point of time. Educational Technology can be brought within the ambit of structural framework of dealing with tribal education in a soft way promoting self-learning.

A lot of parental awareness and removal of negative and allergy towards educational among tribal parents have to be undertaken through mass programmes, mass media. Attitude changes will bring educational changes.

Structurally, Preschool Education, Primary Schools, ICDS, NFE Centres, Balwadis etc. will be organically linked and integrated with TLC projects in the age group 3 to 14 and adults in the age group of 15+ ensuring proper essentials and minimum levels of learning.

A Centre for Learning, Research and Development can really go to the crux of the problems of intervention and monitoring, evaluation and change in overhauling tribal education based on humanistic approaches.

Research directions in tribal education

It has been already pointed out that programmatic research on tribals are available in the field of anthropology, sociology but in the areas of psychology and education it has been receiving a lip service over the years. It is frustrating because this neglected group unless looked from socio-psychological and educational viewpoints will remain out of full development of their potential and our ignorance of their strengths and deficiencies. A programmatic research is needed not only for survival of researchers but also for the benefit of the oppressed.

Since the problems are ecology specific and broad deep mooted there may be priortisation in terms of contents or areas and as well as time required.

Some of the short term studies should focus upon expectations and aspirations of children from early years of schooling, assessing strength of tribal children and their creative potential, life styles related to education, acculturation, motivational levels and desire for being educated, socialisation in tribal homes and their reorientations, impact of special educational provisions (Ashram school settings), impact of other programmes on educational growth not quantitative but qualitative and identity oriented, social mobility and fear of exploitation.

From the viewpoints of educational growth of tribal children the strategy of research should consist of

Preassessment Phase
Intervention Phase
Terminal Assessment Phase
Implementation Phase and
Policy formation.

In the preassessment phase—assessment of ability, interest, achievement, motivation, personality characteristics of various types of tribal children is necessary not tribal in general. Only on the basis of information tribal subgroups can be grouped under a few broad categories on the basis of commonalities. Some of the school related aspects are to be looked into interms of dropout rates, their antecedents, prevalent teaching modes and methods.

The Intervention Studies would be ranged from preschool period as an integrated aspect of existing programmes and school level integration would consist of development of n-ach, aspiration, reduction of anxiety and fear, raising self concept, language proficiency, shift from tribal language to standard language, parental counselling, appropriate teacher development programme and curricular related intervention on a long term basis.

Terminal assessment studies would reflect quantitative growth rate in education, qualitative development of such children achievement levels, personality make up etc. as conceived in the preassessment phase.

On the basis of these researches policy and implementation programmes can be drawn and evaluative research should be undertaken for assessing the policy outcomes. These phases should be sequential and may also take place currently for developing guidelines and intervention packages including training of manpower to deal with these packages.

Policy research would include wheather education be provided in tribal language, and upto what stage. How would the transition take place? Do they require mainstreamed education or separate institutional provision? How can existing programmes be integrated to education, health and care? What would be the rate of educational technology aids in teaching—learning for this group? Can proper monoitoring and feedback be mechanised or based on observation and hearsay, role of incentives, teacher quality and involvement as well as accountability. Taking all these into account an essential and committee programme can be planned out. Otherwise and research and development will continue but twins would never meet.

Highlights

Education of tribal children is a major concern since the enrolment, retention, enrolment in higher education are dismal except for the up rise in recent decade. Viewed from gross enrolment ratio, net enrolment ratio at primary stage, steady increase in higher and professional education, it seems that tribal education is on the move. Their educability however is limited because of poor ability for concept acquisition, comprehension, abstract reasoning, low linguistic proficiency, poor communication, successive planning, impulsivity, low an-ach etc. Prejudical attitudes are stumbling blocks for furtherance of their education. But these children are malleable. They will profit more from structured school programme at ease. A concerted educational *not* welfare oriented effort is what we need.

REFERENCES

Behura, N.K. (1986). Constraints in Tribal Culture for Formal Education, Adivasi, 26, 4, 27.

Dani, J.B. (1978). Intellectual Achievement Responsibility, Mental Ability and School Learning in Tribal Elementary School Children. M.Ed. Dissertation, RCE, Bhubaneswar.

Das, G.N. (1963-64). Same Aspects of Tribal Education, Adivasi, 9, 2, 21-24.

Das, G.N. (1967-68). Tribal Education (Transition from Orthodox Education Towards Education for Modernity. Adivasi, 9, 2, 21-27.

Das, L. (1987). A comparative study of intelligence social competence, and adaptive behaviour of elementary Tribal School Children with normal Children. M.Ed. Dissertation, RCE, Bhubaneswar.

Das, P. (1984). Structure of Cognitive Abilities among Normal and Tribal Children as a function of Developmental Level, Ph.D. Thesis, Utkal University, Bhubaneswar.

Das, P. (1989). Cognitive Styles of Tribal and non-Tribal Children, Adivasi, 29, 2, 1-5.

Das Gupta, N.K. (1963). Problem of Tribal Education and the Santals, Bharatiya Adimjati Sevak Sangh, New Delhi.

Das Gupta, N.K. (1964). Problem of Tribal Education and the Santals, New Delhi, Bharatiya Adimjati Sevak Sangh, 39-124.

Das Patnaik, P.S. & Das, S. (1977-78). A comparative analysis of the cognitive abilities of unschool children of Bonda and Dongria Kondh of Koraput District, Adivasi, 27, 1-4, 31-42.

Das, S.K. (1993). Development and persistance of creative thinking abilities in tribal children as a function of cognitive and affective intervention. Ph.D. Dissertation, Utkal University.

Dave, P.C. (1954). Report on Ashram Schools, Sevashrams and Training Centres in Orissa State. Vanyajati, Delhi, Bharatiya Adimjati Sevak Sangh, 2, 3, 99-103.

Ekka, E.M. (1973). An Investigation into the Problems of High school Tribal Girls in Sundargarh District, Utkal University, Bhubaneswar.

Kundu, M. (1984). Tribal Education in India : Some problems. Journal of Indian Education, pp.1-7.

Mishra, D. (1975-81). Motivation in Tribal Education, The Educational Review, 1, 5-8.

Mishra, M. (1959) Ashram School, Adivasi, 3, 3 & 4, 33.

Mohanta, J. (1979). Mental Health and Achievement Motivation of the Juang Tribe in a changing socio-cultural setting. Ph.D. Thesis, Utkal University, Bhubaneswar.

Mohanty, C. (1984). Effect of State Trait anxiety on School learning among tribal elementary school children. Ph.D. Dissertation, Utkal University.

Mohanty, J.N. (1966-67). Some problems in Tribal Education in Orissa and their solution. Adivasi, 8, 3, 32-34.

Mohapatra, L.K. (1967). Curricula, Methods and Textbooks in Tribal Education, Tribal Education in India - Report of the National Seminar on Tribal Education in India, New Delhi, Tribal Education Unit, Department of Adult Education, NCERT, 109-120.

Mohapatra, P.C. & Panda, D. (1980). Tribal Problems of Today and Tomorrow, Modern Book Depot., Bhubaneswar.

Mohapatra, S. (1957-58). Adivasimananka Sikhya, Adivasi, 2, 2 & 3 (Oriya), 18-21.

Mohapatra, S. (1984). Tribal in our plural society, H & T.W. News Magazine, Directorate of Harijan and Tribal Welfare, Bhubaneswar, 1, 1, 1-3.

Nayak, B.P. (1991). Achievement motivation and aspiration of tribal and non-tribal children in age group of 7-11, Ph.D. Dissertation, Utkal University.

Padhy, N. (1986). Effects of Schooling on the Development of Logical Thinking and Adjustment Among Elementary School Children, Ph.D. Dissertation, Utkal University.

Panda, K.C. (1974). A Process model approach for Research into retardates parental family. Indian Journal of Mental Retardation, 7, 14-24.

Panda, K.C. (1976). Educational strategies for the under-privileged children, Paper presented at IAAP Annual Conference at Kharagpur.

Panda, K.C. (1977a). Poverty and Educational Planning : What Psychology has to Offer.; UGC Lecture Series.

Panda, K.C. (1977b). Problem of Tribal Education : Some emerging patterns and strategies for change. Tribal Problems of Today and Tomorrow. 1-10.

Panda, K.C. (1978). Schools in Orissa. In Third Education Survey. Ch. 9, pp.112-207.

Panda, K.C. (1988). Social Psychology of Education, In J. Pandey (Ed.) Psychology in India : State of Art, Vol. 2, pp. 279-337, Sage Publication, New Delhi.

Panda, K.C. (1991). Research in Psychology of Education, In M.B. Buch (ed.) Fourth Survey of Research in Education, NCERT Ch. 1. 309-466.

Panda, K.C. (1992). Education of SC/ST children in Orissa during post independence period. Paper presented in State Archieves, Orissa, Bhubaneswar.

Panda, K.C. (1993). Underprivileged children. In Panda, K.C. Elements of Child Development, Kalyani Publishers. Ludhiana.

Panda, K.C. & Dani, P. (1977). Relationship between intellectual achievement responsibility, mental ability and school learning among tribal elementary school children. Mimeo, RCE, Bhubaneswar.

Panda, K.C. & Mahanta, J. (1980). Mental Health, Ethnic Attitudes and Crisis of Ethnocentrism in India. Social Change, 10 (3&4) 10-15.

Panda, K.C. & Panda, A. (1986). Educated Tribal Women : A Study of Perception Roles and Values, Adivasi, 2, 1, 10-15.

Panda, K.C. & Panda, B. (1977). Relationship between conceptual Tempo, Mental Ability and School Learning Among Tribal Elementary School Children (Mimeo), RCE, Bhubaneswar.

Panda, K.C. & Panda, S. (1977). Anxiety and learning among tribal children population, Mimeo, RCE, Bhubaneswar.

Panda, R. (1991). Anxiety, Achievement Motivation Security and Insecurity and Cognitive Processing among Scheduled Caste, Scheduled Tribe, and Non-Tribal School Children, M.Ed. Dissertation, RCE, Bhubaneswar.

Panda, K.C. & Panda, S. (1978). Relationship between anxiety intellectual ability, and school learning in Tribal Elementary School Children. (Research Report), RCE, Bhubaneswar.

Panda, S.C. (1984). Impediments of Education of Tribals of Orissa, Vanyajati, Bharatiya Adimjati Sevak Sangh, New Delhi, 23, 4, 24-28.

Panda, S.C. (1987). Tribal Education in Seventh Five Year Plan in Orissa, The Orissa Education Magazine, 27, 4, 4-11.

Panda, S.C. (1989). Tribal Education in Orissa, DIPS, Bhubaneswar.

Panda, S.C. (1992). Tribal Family and Education, Vision, Jayaprakash Narayana Institute of Social and Economic Studies, Bhubaneswar, 12, 1-2, 30-36.

Panda, S.C. & Panda, U.N. (1987). An analysis of schooling of Orissa. The Orissa Education Magazine, State Council of Educational Research and Training, Orissa, Bhubaneswar, 25, 182, 49-56.

Parida, K.K. (1982). Education of the Scheduled Tribes in Orissa, Fourth Educational Survey, Orissa, Ch. 12, 172-188.

Patnaik, N. (1984). Primary Education of Tribal Children through Mother Tongue, Adivasi, 24, 1 & 2, 30-36.

Rabindranath, M.N. (1980-81). Tribal Education in India from 1949-1961 and its related problems, Adivasi, 20, 104, 31-47.

Rabindranath, M.N. (1982-83). Problem in Tribal Adult Education, Adivasi, 22, 1-4, 22-25.

Rath, R. (1974). Teaching and Learning problem of the disadvantaged Tribal Children. Presidential address of 12th Annual Conference of the Indian Academy of Applied Psychology, Utkal University, Bhubaneswar.

Rath, R. & Dash, A.S. (1972). Cognitive Growth and Classroom Learning of Culturally Deprived Children in the Primary Schools, Paper Presented at the East-West Centre for Cross-cultural Studies, Honolulu.

Rout, P. (1989). Tribal Education In Orissa. Eastern Graphics, Bhubaneswar.

Rout, P.C. (1985). A Multi-dimensional Approach for Analysis of Trends, Perspective and Educational Programmes in Tribal Education and Formulation of Action Strategies, Ph.D. thesis Utkal University, Bhubaneswar.

Santra, S. (1990). Self perception, Parental aspiration, ability and School Achievement of Tribal (Santal) Elementary School Children. Ph.D. Dissertation, Utkal University.

Shaw, B.N. (1959a). Success of Ashram School, Adivasi, 3, 2, 31-32.

Shaw, B.N. (1959b). Vocational Education in the Ashram School, Adivasi, 3, 3 & 4, 31-34.

Shaw, B.N. (1960). Adivasi Sikhya, Adivasi, 4, 1-4, pp.69-72.

Srivastava, L.R.N. (1966). Some Aspects of Integration of Tribal People. Problems of Education of the Tribal People of India - Report of the Symposium on Problems of Education of the Tribal People of India. New Delhi, Tribal Education Unit, Department of Adult Education, NCERT, 10-20.

Srivastava, L.R.N. (1967). Working Paper. Tribal Education in India - Report of the National Seminar on Tribal Education in India, New Delhi, Tribal Education Unit, Department of Adult Education, NCERT, 17-32.

Srivastava, L.R.N., Lal, A.A.C. & Lal, P. (1971). Identification of Education Problems of the Seoara of Orissa, NCERT, New Delhi.

Vyas, A. (1953). Tribal Education in Orissa, Report of the Second Conference for Tribes and Tribal (Scheduled) Areas, Delhi, Bharatiya Adimjati Sevak Sangh, 129-134.

Vyas, A. (1958-59). The test of a good Ashram School, Adivasi, 3, 1, 22-24.

Vyas, A. (1960). Moulika Sikhyara Gurotow, Adivasi, 4, 1-4, 21-22.

Vyas, A. (1963). 15 years progress of tribal education in Orissa, Vanyajati, Delhi, Bharatiya Adimjati Sevak Sangh, 11, 2, 51-54.

Whiteman, M. & Deutsch, M. (1968). Social Disadvantages as relates to intellectual and language development. In M. Deutsch, J. Katz, and A.R. Jensen (Eds.) Social, Class, Race and Psychological Development. New York, Holt, Rinehart, 86-114.

Govt. Publications

National Policy on Education, M.H.R.D., Government of India, 1986, 1992.

Programme of Action, M.H.R.D., Government of India, 1992.

Selected Educational Statistics, Department of Education, M.H.R.D., Government of India, 1975-76 to 1991-92.

Trends in Educational Development of SC/ST in India, Government of India, 1967-68 to 1977-78.

State-wise Information of Education of SC/ST, Ministry of Education, Government of India, 1985.

Census of India Report, 1991.

11

SOCIAL DISADVANTAGE:
Parental Life Style and Achievement

Focus points

Do parents and their life styles as well as childrearing practices create disadvantagedness in their children? To what extent this is real? Chapter XI brings this singular point into focus.

Parental life style: A new dimension to the understanding of disadvantaged

Importance of parental life style in causing social disadvantage in underprivileged homes and consequently influencing characteristics of such children have been recognised since long (Bradley, Caldwell and Elando, 1977; and Hess and Shipman, 1965). White and Watts (1975) have brought volumes of research dealing with parental environmental impact on children coming from lower class families. Educational research has gone a long way in highlighting "children coming from lower class do poorly in school learning" (Strodbeck, 1971).

The term "Parental Life Style" refers to a wide variety of concept such as : Child rearing values, parents adapt, parental expectancy, aspiration, cognitive demands they make on their children, their personality and information processing styles. These are significant inspite of being born in lower class homes because they shape the cognitive, affective and social skills of the children reared by such parents. The hidden curriculum has a special meaning in the context of development of such children.

Hence, there is a need of appropriate parent counselling and training of teachers to handle such children. But in our social context except for speculatory premises and prescriptions hard core data for the improvement of children based on understanding and redesigning parental life style is lacking. Unfortunately priority has been on physical expansion with statistical profile not real achievement of disadvantaged children.

A comprehensive study on this aspect is available (Panda, 1983). Parental life style variables and characteristics of children coming from underprivileged homes are related. The study aimed at:

- describing the nature of parental life style prevalent in underprivileged homes;
- describing the characteristics of underprivileged children;
- demonstrating the relationship between parental life style and characteristics of children;
- determining the predictive character of parental life style, variables for children's cognitive competence and personality and adjustment characteristics;
- delineating the inter-relationships among the various characteristics of parents; and
- establishing the inter-relationships among the various characteristics of children.

The parental life style variables included in this study were: structural characteristics, (occupation, income, education, family size, and family type), parental expectancy, parental life style, parental achievement orientations, parental locus of control. The characteristics of children measured were : intellectual achievement, responsibility for success, failure and total responsibility, self-concept, adjustment, intelligence, and school achievement.

The sample consisted of 200 families categorised as lower or underprivileged homes on the basis of their income and memberships in lower social class. All the families were non-caste Hindus i.e., Scheduled Caste and Scheduled Tribe and in each, both parents were living at the time when the study was conducted. Further they had atleast one school going child who was reading either in class-IV or V the period by which these children drop out from the school system. Sixty class room teachers were also included in the study to obtain teacher rating of adjustment in school. The children sample consisted of 71 boys and 24 girls reading in Class-IV, and 65 boys and 40 girls reading in Class-V. The CA of children ranged between 9+ to 11 years.

Each parent was interviewed individually with the parental life style questionnaire developed for the purpose of having a KR-21 reliability (r=.71), parental expectancy questionnaire, parental achievement orientation scale, parental locus of control scale, and data concerning certain structural characteristics were also obtained, i.e., parental occupation, education, nature of family, number of members in the family, parental income etc.

The children were tested individually or in small groups of 2 to 3 depending upon their availability in the different schools. The tests administered were: Intellectual Achievement Responsibility Questionnaire (Grandall et al. 1965), self-concept (Piers and Harris, 1969) and Coloured Progressive Matrices. Adjustment of these children in school was assessed using rating scale. School achievement was assessed in terms of marks obtained in two successive school examinations.

Structural characteristics of the family, characteristics of children, parental life style variables were first analysed using Means, SDs, and Analysis of variance. Inter-relationships were obtained by computing coefficient of correlations. Predictive nature of the parental life style variables were analysed by using Multiple regression analysis and analysis of variance for the regression. Results were analysed for each parent separately and then by clubbing both of their responses. Analysis was also done separately for the boys and girls reading in Class-IV and V boys, and girls and total sample in order to establish clear cut conclusions. The results are:

- ✱ Most of the parents in the underprivileged homes are illiterate. They have low income. They are engaged as daily labourers or unskilled jobs. They have a fairly large family to support. The type of family structure in which they live is nuclear.
- ✱ Parents in underprivileged homes are fatalistic and

externally oriented. They have evidently low level of expectancy and low achievement orientation. They are mostly tradition bound in their style of life. There is no significant sex difference in the characteristics of parents.

* Chidren coming from underprivileged homes are self-responsible with regard to attribution of causality. They attribute causality more to themselves in success situation than in failure situation. He difference in IAR due to scales, sex, and educational levels was observed. Their self-concept is slightly positive, school adjustment is above average but competence in terms of school achievement and intellectual ability is strikingly low.

* Father's educational status is significantly related to self-concept, adjustment, and school achievement of girls reading in class-IV but for the entire sample of boys and girls the relationship is near zero. It only explained a negligible percent of the total variance of the characteristics of children.

* Family income is positively related only to school achievement for the girls of Class-IV and is negatively related to achievement responsibility score of boys. The trend of relationship for other subgroups of children on this point are negative but insignificant. It has only contributed one per cent of the total variance.

* Occupation of the father contributed to 32 per cent of the total variation in different characteristics of children.

* Relationship between type of family and various characteristics of children are negative. Nuclear family structure is conducive for healthy development of characteristics among children.

* Increased family size is negatively related to children's characteristics. Eleven per cent of the total variation in characteristics is attributed to family size.

* Parental expectancy whether that of the father or that of the mother or combined has no relationship on the development of personality and cognitive characteristics of children.

- There is no differential pattern of relationship between the characteristics of male and female children with that of the father's life style. It has negligible contribution to total variation in the various characteristics. Mother's life style is negatively correlated to boys attribution in failure situation and girl's adjustment scores. Pooled parental expectancy scores have no significant relationship with characteristics of children.
- Father's locus of control is negatively related to boy's achievement responsibility and intelligence whereas, adjustment of girls is negatively related with father's locus of control. Mother's locus of control is not related to characteristics of children. The combined parental locus of control scores indicate a negative relationship with children's characteristics only in case of Class-IV girls but it did not predict variation in criterion variables when the entire sample was taken into account.
- Achievement orientation scores of fathers is not related to any of the characteristics of boys and girls at either educational level. Mother's achievement orientation contributed moderately to variations in school achievement.
- Pooled parental achievement orientation score is negatively related to intelligence of boys. However, parental achievement orientation score in general has near zero relationship with children's characteristics as revealed from regression analysis. On the average, occupation of the father contributed moderately to social adjustment, intelligence, and school success of children. Occupation of the mother contributed to the variation in self-concept, IAR for success, and school achievement. Type of family contributed variations in IAR (success), IAR (failure), self-concept, social adjustment, and intelligence. Size of family contributed to variation in IAR and school achievement. Mother's achievement orientation contributed to variation in school achievement.
- For the entire sample of children the F-ratio for regression of social adjustment and school achievement are significant.

- Parental achievement orientation, life-style, expectations, locus of control are low because of membership in underprivileged section of the community but are not related to occupation, income, family type or size.
- Income of family, occupation, and education are interrelated. Size of family and type of family are positively related to each other, but there is less similarity between the occupation of parents.
- Parental expectancy and life style are significantly related to each other, but both these variables are not related to locus of control and achievement orientations. There is less of direct relationship between the life style, achievement orientation, and locus of control of fathers and mothers.

In general, IAR, Self-concept, adjustment, intelligence, and achievement scores of children are significantly related to each other even though the scores on each variables are not high.

The results have significance in terms of sociological, psychological, and demographic mileu of the underprivileged homes with increased class conciousness and role expectation in the emerging Indian society where the down trodden tries to establish his fundamental rights and strives to grow while parents remain tradition bound and demonstrate their belongingness to class, the younger generation use underprivileged milieu as a defence to rise and grow. A new kind of hidden curriculum is slowly and surely emerging and influencing the characteristics of children reading in school who are coming from underprivileged homes. In the changing social order and rising expectations, the children look for the future and probably this struggle offsets the ill effects of underprivileged home memberships in a modernising society which permits acculturnation of values. These challenging interpretations definitely deserve further considerations in terms of educational implications and research and innovations.

How meaningful are these findings from the point of view of classroom applications?

First of all, parental life style variables have influenced the development of characteristics in children in the predictable direction so far as the structural characteristics are concerned but with regard to expectancy, achievement orientation, life style, and locus of control and relationships are either negative, or zero.

These lead one to expect that membership in an underprivileged home in and by itself does not produce much deficits in personality and cognitive characteristics because the children in school compare themselves with others. Instead of being teased they try to compensate their deficits arising out of lower socio-economic-educational million at home. This is probably the indirect effort which a modernising society brings among those for whom modernisations schemes are meant. This is a powerful conclusion which needs to be substantiated by further research.

The children no longer cling to their social class and exhibit much of dependent prone behaviour which can be inferred from the data on characteristics of children.

Hence, for a teacher it tells, the hidden curriculum in the class room is no longer deficit prone psychologically though physical indexes are confusing. Hence, in the classroom instruction there should be emphasis on development of favourable social-emotional climate where creativity can be fostered, self-concept may be enhanced, achievement and adjustment may be raised and intelligence can be properly developed. The teachers might tell stories, bring success experiences gradually, ask children to look ahead, do not permit discriminating, children coming from the underprivileged homes will find emotional anchorage and will shine to a considerable degree. If on the other hand, teachers are guided by self-fulfilling prophecies the situation would be devastating from the point of view of children. The findings tell us that lower class or underprivileged children will function better if we take these children as children not as children at risk, which is very often true.

It does open possibility for parent counselling either through mass media or through parent teacher associations. In fact, the findings wide open many serious research considerations since this is a single study where the observed findings are contrary to expectations i.e. instead of a clear cut positive relationship between most of the parental life style variables and children characteristics the correlation are either negative or zero.

There is no differential relationship between fathers and mothers with regard to male and female children which is true in middle class homes. Hence, it is for the researchers to think for making indepth study on the dynamics of the achieving process of the underprivileged children in a developing society where class consciousness is steadily disappearing and a new consciousness is emerging i.e., we can do what ever man can do. The present findings lie at the heart of this formulation on which researchers can probe and prove.

It suggests further, that when abilities are interrelated among these children and the scores are higher than the average it may be worthwhile to find out aspirations of the children brought up in lower class homes, the psychological reasons for dropout from the school system because middle class children sometimes become so tryrant like the teasing type that children with a stigma or a label quit sitting together or even seing each other.

It is true that physical facilities in home does provide a scope for furtherance of psychological characteristics in children but it is quite conceivable that when facilities are lacking children try to utilise the facilities outside and compensate the depriving states. The earlier studies which went to establish a deficit as well as difference interpretation to the lower class structure may no longer remain true where most families belong. to underprivileged homes. Hence, instead of attributing deficits to physical deficiencies it is a desirable slip to see how untouchability acts as a deterrant to well being of lower class children. Case studies may be undertaken to high light the self-perceptions of the children in underprivileged homes at different levels of development or education which may help us to know in detail the process of growing up in an underprivileged homes thus contributing to an ethno-ecology of development. Self-perceptions of these children in integrated school setting may be a worth while undertaking. Status surveys are meaningless at this moment, rather insight into the processes causing them to grow and thereby engineering such processes would be a more fruitful step from the research point of view.

The study offers a promise for educational practice and open up possibilities of research which eventually will contribute to a new type of ethno-ecology of development of human behaviour in the context of a changing social order particularly in the context of social disadvantage.

Highlights

Parental life style cause social disadvantage. Children coming from poor homes do poor in learning. There is a hidden curriculum which influences the child either to become disadvantaged or be in a normal position. Most parents of disadvantaged children are illiterate, unskilled, poor fate oriented, poor self-concept and have low ecpectancy. These conditions can be reversed through parental counselling and structured instruction in the classroom.

REFERENCES

Bradley, R.H.; Caldwell, B.M. and Elards, R. (1977). Home environment, Social Status and Mental Test Performance. Journal of Educational Psychology, 69, 697-701.

Crandall, V.C.; Katkovsky, W. and Grandall, V.J. (1965). Children's beliefs in their own control of reinforcements in intellectual achievements situations. Child Development, 36, 91-109.

Hess, R.D. and Shipman, V.C. (1965). Early experience and the socialisation of cognitive modes in children. Child Development, 869-886.

Panda, M.D. (1983). The relationship of parental life style to intellectual achievement responsibility, adjustment and cognitive performance among underprevileged children. Ph.D. Psychology, Utkal.

Piers, E.V. and Harris, D.B. (1969). Manual for Piers and Harris Children's self-concept scale. Counseller Recordings & Tests. Nashville. Tennesse.

Strodbeck, F.L. (1971). The hidden curriculum in the middle class Home. In J.D. Krumboltz (ed.) Educational Process. Rand McNally.

White, B.L. and Watts, J.C. (1973). Experience and Environment : Major influence on the development of young child. Englewood Cliffs. Prentice Hall.

12

POLICY, PLANNING AND PROGRAMMES

Focus points

Has education of the Disadvantaged an evolutionary history of development? What has been achieved in this regard since independence as regards policy framing and outcomes? What are the recent thrusts? Chapter XII speaks through these pages the systematic changes and action programmes.

Education in India during the post independence period has been guided by the national goals and asirations as enshrined in the Indian constitution. The Education Commission 1964-66 and the adoption of 1968 policy marked a significant step in the history of Indian education. While the recommendation and general formulations incorporated in 1968 policy had impressive achievements, there was no detailed strategy of implementation. It was in response to this that the new National Policy on Education was adopted in May 1986 after a comprehensive appraisal of the education 'State of Art'. One of the significant aspect of NPE 1986, is the greater concern for the success to education of the disadvantaged section of the society, SC/ST, the educationally backward, girls minorities and disabled. An attempt has been made here to provide a brief mention of the policy guidelines and action frame.

Education commission (1964-66)

The commission recommednded that the existing programme for education of scheduled caste should be expanded and continued. Education of Scheduled Tribe deserves special emphasis.

Special attention has to be paid to the needs of tribal people to ensure that they receive a fair share of the benefits of educational development particularly an integrated development. Their education should be related to the scheme of economic and social development and responsive to the cultural and economic needs of the people. They commission has analysed the present position, development in primary education, secondary education, higher education and outlined the constraints. They stressed that school programme should harmonise with the environment. The school homes should coincide with their agriculture and forest operations. Tribal culture should form a part of extra curricular activities. Special vocational schools should be opened for these children. A continuous programme of research and evaluation has to be developed for this purpose, in addition to tribal research institutes. Same benefits are to be given to backward classes.

NATIONAL POLICY ON EDUCATION, 1986

The education of scheduled castes

The central focus in the SCs educational development is their equalisation with the non-SC population at all stages and levels of education, in all areas and in all the four dimensions - rural male, rural female, urban male and urban female.

The measures contemplated for this purpose include :

(i) Incentives to indigent families to send their children to school regularly till they reach the age of 14;

(ii) Pre-matric Scholarship Scheme for children of families engaged in occupations such as scavenging, flaying and tanning to be made applicable from class I onwards. All children of such families, regardless of incomes, will be undertaken;

(iii) Constant micro-planning and verification to ensure that the enrolment, retention and successful completion of courses by SC students do fall at any stage, and provision of remedial courses to improve their prospects for further education and employment.

(iv) Recruitment of teachers from Scheduled Castes;

(v) Provision of facilities for Sc students in students' hostels at district headquarters, according to a phased programme;

(vi) Location of school buildings, Balwadis and Adult Education Centres in such a way as to facilitate full participation of the Scheduled Castes;

(vii) The utilisation of Jawahar Rozgar Yojana resources so as to make substantial educational facilities available to the Scheduled Castes; and

(viii) Constant innovation in finding new methods to increase the participation of the scheduled castes in the educationl process.

The education of scheduled tribes

The following measures will be taken urgently to bring the Scheduled Tribes on par with others:

(i) Priority will be accorded to opening primary schools in tribal areas. The construction of school buildings will be undertaken in these areas on a priority basis under the normal funds for education, as well under the Jawahar Rozgar Yojana, Tribal Welfare Scheme etc.

(ii) The socio-cultural milieu of the STs has its distinctive characteristics including, in many cases, their own spoken languages, This underlines the need to develop the curricula and devise instructional materials in tribal languages at the initial stages, with arrangements for switching over to the regional language.

(iii) Educated and promising Scheduled Tribe youths will be encouraged and trained to take up teaching in tribal areas.

(iv) Residential schools, including Ashram Schools, will be established on a large scale;

(v) Incentive schemes will be formulated for the Scheduled Tribes, keeping in view their special needs and life styles. Scholarships for higher education will emphasise technical, progessional and para-professional courses. Special remedial courses and other programmes to remove psycho-social impediments will be provided to improve their performance in various courses.

(vi) Anganwaldis, Non-formal and Adult Education Centres will be opened on a priority basis on areas predominantly inhabited by the Scheduled Tribes.

(vii) The curriculum at all stages of education will be designed to create an awareness of the rich cultural identity of the tribal people as also of their enormous creative talent.

Minorities

Some minority groups are educationally deprived or backward. Greater attention will be paid to the education fo these groups in the interests of equality and social justice. This will naturally include the constitutional guarantees given to them to establish and administer their own educational institutions, and protection to their languages and culture.

PROGRAMME OF ACTION, 1992

Education of scheduled castes and scheduled tribes and other backward sections

Present situation

According to 1981 census, the population of Scheduled Castes (SCs) was 10.6 crores and that of Scheduled Tribes (STs) 5.4 crores accounting for 15.75% and 7.8% respectively of the country's population. The corresponding figures of 1991 census are not yet available.

According to 1981 census, the literacy rates of SC and ST population were 21.38% and 16.40% respectively as against 41.22% of non-SC/ST population. The literacy rates of women for these categories were 10.93, 8.04 and 29.43 percent respectively. The corresponding figures of 1991 census are no yet available. The propertion of enrolment of SC/ST children continues to be much less than their population proportion except in the case of primary education where the enrolment ratios are comparable to the general enrolment. But this is possibly due to the higher proportion of over-age children amongst these categories.

The drop-out rate among SC/ST students continues to be very high at all levels of education. The drop-out rates for the year 1987-88 amongst SC, ST and general population are give below:

Drop-out rates (1987-88)

Classes	*SC*	*ST*	*General*
I - V	51.60	65.21	46.97
I - VIII	68.81	80.01	62.29
I - X	81.98	87.62	75.30

The NPE, 1986 was unambiguous about removal of disparities and attainment of equalisation of educational opportunities for SCs, STs and other Backward Sections, specially for girls. The POA detailed a number of strategies aimed at accelerating their rate of enrolment and retention. The NPERC as well as the JRC have reiterated the need for concerted efforts for bringing about equality of educational opportunity and achievement for SCs, STs and other backward sections of the society. However, despite the policy imperatives, the implementation of the various schemes has not been commensurated with the goals set up for each scheme.

A number of Centrally Sponsored Schemes are being continued in the 8th Five Year Plan (1992-97) for SCs, STs and other backward sections. These are (i) Post-matric scholarships; (ii) Grant-in-aid to voluntary organisations; (iii) Pre-matric scholarships for children of those engaged in un-clean occupations; (iv) Book banks; (v) Boys' and Girls' Hostels; (vi) Coaching and allied schemes. In addition to these, two schemes in the central sector have also been approved, viz., (i) special educational development programme for girls belonging to SCs of very low literacy levels, and (ii) educational complex in low literacy pockets for development of women's literacy in tribal areas. These programmes are in addition to the special thrust given to the weaker sections in the general programmes for educationl development like opening of schools, running of Non-Formal Education (NFE) centres and adult education centres, schemes of Operation Blackboard, upgradation of merit of SC/ST students, reservation in educational institutions, etc.

Elementary education

Taking into account the experience gained in the implementation of NPE, 1986 and POA, the following strategies are proposed:

(a) Access and enrolment:

In order to ensure universal access and enrolment of SC children in rural areas, henceforth, in opening primary and upper primary schools priority would be given to the needs of SC habitations and hamlets. As far as possible pre-primary section will be an integral part of such schools. Every scheduled tribe habitation will be provided with a primary school or other suitable institution before the end of the 8th Five Year Plan in order to ensure universal enrolment and participation. In tribal areas educational plan will be implemented in an integrated manner, Pre-school education (through Balwadis), Non-formal Education, elementary education and adult education will be organically linked and integrated to ensure achievement of total literacy of the entire population. This integrated Educational Complex will be responsible for total education within its area serving all children in the age-group 3-14 and adults in the age-group 15 and above. For SC children access and enrolment will be assured primarily in the formal school. Where SC children are not able to attend the formal school provision for non-formal and distance education centres will be made to ensure universal access and enrolment. It will be responsibility of the teachers to organise drives at the beginning of every academic session to enrol all school-age children specially girls belonging to SCs, STs and other backward sections. For this purpose active assistance of voluntary agencies and local communities shall be taken. Traditional and folk media can be very effective in reaching parents and children in remote areas to motivate them.

(b) Participation

Adequate incentives will be provided for the children of SC, ST and other backward sections in the form of scholarships, uniforms, textbooks, stationery and mid-day meals. All Schools, NFE centres and pre-school centres in SC/ST habitations will be equipped with necessary and essential infrastructural facilities in accordance with the norms laid down for Operation Blackboard and for achieving Minimum Levels of Learning (MLL). Operation Blackboard shall cover within a period of two years all schools in tribal areas and Harijan Bastis irrespective of the date on which the school was set up. The indigent families among SC/ST will be given incentives to send their children, particularly girls, to schools.

(c) Achievement

Children from tribal communities will be taught through the mother tongue in the earlier stages in primary school. Teaching/learning material in the tribal languages will be prepared providing for a transition to the regional language by Class III. The home language of children of SC/ST may be different from others. Therefore, standard teaching/learning material will be re-written to make them intelligible to the SC/ST children especially in areas where the standard language and the learners' dialect are different. It will be ensured that MLL already set up for eprimary schools will be achieved, that the necessary standards of three Rs are acquired by all children in SC/ST communities. Effective methodologies for measurement of MLL will be implemented.

Adult education

Adult education programmes will be an integrad part of educational micro-planning in all tribal areas. Under the total literacy campaign SC and ST pepulations will be the major focus for achieving total literacy. Special attention will be paid to adult illiterate women. Adult education programmes for SCs/STs will essentially be programmes of empowerment. Special and relevant curricula and materials shall be prepared for this purpose as a crash programme. Post-literacy centres will be set up in SC/ST areas where literacy campaigns have been carried out in order to provide facilities for continued literacy for adult neoliterates specially women.

Incentives

Under the scheme of pre-matric and post-matric scholarships, the rates will be linked with the increase in the cost of living index. Scholarships for SC/ST students in upper primary (middle) school and onwards will be distributed through bank/post-office. Scholarships will be payable in advance on the first day of each month. Special provisions will have to be made to allow minor children to operate bank accounts. Coaching, training and remedial teaching classes will be organised for students of SC/ST and other backward sections in order to enhance the scholastic achievement of these students. Special coaching for entrance examinations for institutions of higher learning, particularly for professional courses to be provided to SC/ST students of Classes X and XII. Residential facilities will be provided for SC/ST girl students preparing for competitive examinations. Additional scholarships will be provided for SC/ST girl students in the secondary and senior secondary classes. Special coaching and remedial courses will be organised for SC/ST girl students. Merit Scholarship Schemes covering A Grade students will be implemented in all the States. Books of proven quality including classics from Indian and foreign languages will be abridged, adaptea, translated and reproduced and made available at subsidised rates to the children and neo-literates in SC/ST communities.

Reservations

Implementation of reservation will be monitored at all levels and failure to adhere to the same will be made punishable. Reservation in recruitment of teachers from SC/ST communities will be ensured in all educational institutions. In Navodaya Vidyalayas, admission for SCs and STs are reserved on the basis of either the national norm of 15% and 7.5% respectively or of the percentage of SC and ST population in the district, whichever is higher. This principle will be considered for adaptation by State Governments in other educational institutions, wherever feasible, the criterion of reservation being the national percentages of 15 and 7 1/2 or the State percentages of SC and ST or the district percentages of SC and ST, whichever is higher. Through an appropriate scheme facilities will be provided to SC/ST children for studying in reputed private educational institutions of high quality. Reservation will be provided for SC/ST children in schools which receive grant-in-aid.

Teachers and their training

Where teachers are not available in schools located in SC/ST localities, carash programmes for giving suitable training to eligible persons from SCs/STs will be started. The eligible amongst them will be appointed at teachers in the schools. Specified teacher training institutions such as DIETs will be identified for training of SC/ST teachers on a large scale. In order to encourage SC/ST students to become teachers special courses integrating secondary. senior secondary and professional training will be devised. This will encourage such candidates to opt for the teaching profession from an early stage and get adequate training as teacher. Wherever possible husband-wife teams will be posted as teachers in tribal areas. This will ensure high participation by such teachers in school education.

Additional measures

A chain of pace-setting institutions from primary to higher secondary will be established in areas of SC/ST concentration for providing quality education to talented learners as well as for upgrading the achievement levels of comparatively slow learners in these communities. Education in tribal areas should be linked with outdoor activities. Many tribal children excel in sports, games and other out-door activities. Such talent must be identified and nurtured. Adequate coaching will be provided at early stages so that these talented sportsmen and women can participate in sporting activities and competitions. Scholarships will be provided for such students paying special attention to their dietary requirements. There is need for improvement in the standards of hostels for SC/ST students. Special attention has to be paid to the nutritional need of the students. As far as possible hostels should be managed by teachers. Hostels for SC girls should be constructed in or around the vicinity of the school/College where the girls are enrolled and adequate security measures should be provided. Hostels should preferably be run by Non-Governmental Organisation (NGOs). There is need to incorporate in the schools curriculum philosophy of Dr. Ambedkar which emphasised on untiring effort to alleviate the educational standards of SC/ST persons, an inculcation of an understanding among teachers and students about the richness of the culture of SC/ST and of their contribution culture and economy.

Other educationally backward section

Special efforts will be made to improve the educational infrastructure in remote and inaccessible areas, border areas, islands and hilly and desert areas and areas of concentration of educationally backward sections. Measures will also be taken to ensure that incentives in the form of scholoarships, uniforms, books, stationery, etc. reach the clientele groups.

Monitoring

In addition to the monitoring by the existing scheme, monitoring of education in SC/ST areas will be entrusted to the local community/village education committee with adequate representation of SC/ST members specially women. The local community will take the total responsibility of planning the educational facilities in SC/ST areas. In most of the States and at the Centre the incentive programmes like scholarships, mid-day meals, free uniforms, etc. and setting up to hostels and Ashram Schools for SC/ST are being implemented by the Welfare Departments, While the Departments of Education run programmes of setting up of schools, appointment of teachers, preparation of textbooks, curriculum, etc. which cater to SC/ST students as a part of the general programmes of the Education Departments. It would, therefore, be appropriate that the monitoring is done by the respective departments implementing the programmes. The Joint Monitoring System developed for this purpose by the Ministry of Human Resource Development, Ministry of Welfare and Planning Commission will be taken up earnestly. In some States educational institutions for Scheduled Tribes are being run by agencies other than the Education Department. It is better that these are managed by Department of Education.

Evaluation of schemes

A number of evaluation studies have been conducted on the implementation of Centrally Sponsored Schemes as well as schemes of the State Goverments. For example, in the recent past, the post-matric scholarship scheme has been reviewed by the Department of Personnel and By NIEPA. Pre-matric scholarship schemes of the State Governments have been evaluated by NCERT. The Girls' Hostel Scheme was reviewed by three research organisations under the scheme of evaluation of the Department of Education. Many studies have also been conducted under the programmes of assistance of Ministry of Welfare, NIEPA, NCERT, Tribal Research Institutes, etc. But there does not seem to be a proper follow up of the reports. What is needed is a systematic documentation and utilisation of the findings of the reports for taking corrective action.

Acharya Ramamurty Committee and Janardan Reddy Committee have reiterated these stand.

Highlights

Education since independence has been guided by national considerations. The Education Commission (1964-66) has specifically recommended for the expansion of educational programme of SC/ST Children. The National Policy on Education 1986 has gone very deep in spelling out the details of infrastructure, incentive schemes, teachers recomitment, student's residence opening of Special Schools, preschool centres both for SC/ST children. The present scenario has been presented to provide a comparative fingure post for future analysis of data, Curriculum planning, medium of instruction at the initial stage, remedial instruction, are some of the redeeming recommendations of the policy frame.

REFERENCES

Acharya Ramamurty Committee Report on NPE, 1992.

Janardan Reddy Committee Report on NPE, 1992.

National Policy on Education, 1986. Ministry of Human Resources Development, Government of India, New Delhi.

National Policy on Education, 1992 (revised). Ministry of Human Resource Development, Govt. of India, New Delhi.

Policy on Education, 1968, Govt. of India.

Programme of Action, 1992. Ministry of Human Resource Development, New Delhi, Govt. of India.

Report of the Education Commission-1964-66. Govt, of India.

13

INTERVENTION PROGRAMMES AND STRATEGIES

Focus points

Are the ill effects of deprivation irreversible ? Does a child come back after a poor start ? Should the programme of intervention should be planned phase/stage wise ? What components should get into the programme? Here are the tips of these querries.

The concept 'intervention' is quite common in the western world where segregated schools exist for ethnic groups. Intervention aims at enriching, supplementing deficiencies to help the child to come to the mainstream. This intervention programmes can be introduced during early childhood in family, at pre-school centres or at school as a part of the ongoing activity.

Pre-school intervention

Pre-school intervention required careful planning in terms of instructional objectives and procedures for dealing with intellectual and motivational problems. The break through can come only happen through appropriate method of teaching, language training, learning readiness, training in information processing, social learning, removal of alienation, building selfesteem, responsibility, recognising their worth. Deutsch (1964) suggests cognitive growth as the best therapy for the socially disadvantaged. Bloom, Davis and Hess (1965) stressed that well structured programme should be introduced during ages 4 to 5 i.e., preschool years for raising their entering behaviour necessary for school learning.

DeCecco (1968) reinforced this idea and stated that disadvantaged children come to school less equipped from a preschool environment to begin his formal education. He cann't adjust to the middle class school and culture. There is lack of person environment fit situation for him. He is less motivated and eventually drops out of the school. DeCecco (1968) further suggests, use of curiosity, exploratory behaviour and use of tangible incentives particularly for the low SES children. Sequential and hierarchical aspect of learning experience also require proper attention of pre-school disadvantaged children. Puppet training for language training, and synonymous word teaching as the basis of language learning are also in use.

After reviewing the literature in the field Yee (1969) suggested building interpersonal relationship between teachers and pupils and for Coleman (1966) redesinging the school environment is essential. As regards teacher training Gottlieb (1954) emphasised content enrichment for teachers of Negro/ Low SES children and preferebly teachers from their own communities should be appointed as these teachers will be accepted and they will be to assess pupil's problem.

Based upon experimental evidences many programmes and projects have been undertaken in Western countries to mainstream scoially disadvantaged. In India, there is a greater need for such measure on a revoluntionary basis. It is true that commensurate with National Policy on Education several measures are under way including early childhood education and care.

By the time the disadvantaged children come to school their cognitive growth is retarded. Therefore, Cohen (1969) suggested information procesing, need fulfilment, looking at the whole child and language training as interventions. While Karnes (1958) showed community integration increased IQ by 5.1 points whereas direct verbal approach led to an increase of 14.4 points in I.

What should be then focussed in a preschool learning programme? De Cecco (1968) lists a few points of reference:

(a) Enrichment of visual perception through objects.
(b) Language and speech interactions in home, radio, etc.
(c) Training in memory and connecting past/present.
(d) Sensory stimulation.

In addition to the above, programme should aim at total social maturity and interventions should be based on specific diagnosis.

Can children come back really after a poor start?

Do studies orient us then to think less hopefully about the fate of the deprived group? This question was asked by Prof. Sinha (1976) after examining a whole series of work on deprived. He believed that an early enrichment programme at the preschool and kindergarten levels may be helpful in arresting or reversing the cumulative deficit. For the Indian disadvantaged tribal children Rath (1974) recommended interventions in form of compensatory and high intensity education as remedial measures. The writer (Penda, 1976) has also suggested the special requirements of an instructional pattern that will be suitable for the disadvantaged children. The suggestion included modification in teacher training curriulum, changing the life style characteristics of the deprived,use of accelerated learning programmes and changing the motivational and affective climate of the classroom (Panda and Lynch, 1972). The scope here is not to go in depth to the various intervention programmes but just to point out what approach we might consider while planning for an intervention programme for the children and for the institution.

Perhaps the answer may be sought in training the deprived children for realistic goal setting, developing self attribution, developing a more analytic way of information processing while in school and giving training for intellectual activities and skills where they are deficient. But it is essential that parental education is more crucial in so far as providing an enriched interacting environment in early childhood it concerned.

A brief review of such approach is considered necessary at this point. The Coleman data has proved that integration resulted in improvements in the achievement test scores of black students, i.e., Black students in integrated schools do better than those in Middle class all Black schools. Coleman suggests that the overall gain in verbal ability for Blacks in an integrated school is approximately 1/4 of a SD. Crain and Weisman (1972) observed the problem of achievement in relation to integration. They defined integration (a) the Negro students attended in school with White for atleast 5 years, (b) no White student did move out of the school, (c) the school was atleast half White.

It was found that nearly 1/2 of the segregated pupils did not finish high school (48%) compared to 36% students of integrated schools. That is drop out rate is reduced by 1/4 in integrated schools. Further integration seems to cut the drop out rate.

More specifically, the findings were :

1. Pupils of integrated schools are more likely to finish elementary and high schools and to attend and finish college.
2. Students who attended integrated high schools and segregated elementary schools fare as well in terms of finishing high schools as those whose schooling was entirely integrate.
3. The effects of integration are stronger for both men and women students.
4. Students who attend integrated schools scored higher on the verbal achievement test than those who attended segregate schools.
5. Occupying a deprived status or a minority status in a integrated school failed to show social and psychological strain among the pupils.

Optimism concerning the effectiveness of preschool compensator programme such as project Head Start has waived considerably in the last few years. Findings have been consistent that at the end of a year of Head Start type of experience children as superior to children without pre-school experience in both intellectual and social emotional functioning (Weikart, 1971). However, the superiority of Head Start children vanishes or is greatly diminished by the end of one year of formal schools (Bronfenbrener, 1974). In the fact of this evidence some have concluded that compensatory education or Head Start in particular, is a failure. It is unrealistic to expect long term effect of a short term intervention. But it cann't be denied that the programs have in fact been successful partially in removing educational disadvantage which economically disadvantaged children might encounter in later life. For this reason the Follow Through Project has been introduced which is 4 year compensatory education programme in U.S.A. school system. Longitudinal data analysis revealed that the follow through programme was not capable of ameliorating all of the negative effects of living in an economically disadvantaged group, however, the programme was highly beneficial to the children who participated in it. The longitudinal and cross-sectional evidence together point to the conclusion that the gains accruing from compensatory education programmes are commensurate with the duration and amount of effort put on these programmes.

Developmental psychologists agree on two basic assumptions: Environmental factors help determine how fast or slow children develop intellectual ability, and second, experiences during the first years of life strongly shape children's relative intellectual functioning. Havard University psychologist Prof. Kagan asks a fundamental question. Are the ill effects of early deprivation irreversible ? Or does delayed growth persist in children ? "Only if the environment that causes the delay remains the same", replies Kagan to his colleagues.

Kagan (1975) from his studies in Guatemala, a non-vestern culture came to a conclusion - "Children, listless, silent, apathetic infants, passive, quiet, timid three years olds but active, gay, intellectually competent 11 years olds". He said that children are more resil ent and more malleable, that is more capable of making a comeback after a poor start, than most psychologists have believed. Kagan readily admits that his data are not yet adequate to prove the thesis he is putting forward, but they provide sufficient evidence "for a grand jury to say, there should be a trial".

In the isolated Indian village of San Marcos in Guatemala babies are raised in small, dark huts that lack even eindows. Thouth loved and cared for, these infants are not allowed outside were it is thought sun or dust might harm them. In psychological terms, they lack experiential variety-the very thing essential for intellectual development and later achievements : and they must contend with malnutrition and disease which combine to retard their development as well. By comparing the developments of San Marcos infants with American Babies of two years old, Kagan and his co-research workers found that San Marcos children are 2 to 3 months behind.

Kagan had sampling problems but his one year observation of children "with pale cheeks and vacant stares has the quality of tiny ghosts" would suggest that infant's development was in fact retarded.

By age 3 or so the children still seemed inordinately inhibited and shy, but says Kaga, "they to look like children". Cross sectional studies using American children and Guatemala children revealed, although the 8-9 years old American Children did well on a few culturally fairer memory and intellectual ability tests than 8-9 years old Guatemala, at age 10 and 11 no such difference was observed between the two groups, Kagan attributes the 'make up' to change of environments of the San Marcos children to an urban setting. Whatever may be the limitations, Kagan emphatically stated "you may be late but you can get there" because there is inherent relilency in human development. Kagan in no way implies that the early environment is not important, or that in an age-graded schooling system parents should not be concerned with nurturing children's early growth. But he emphasises the reversibility of early deprivation by making the provision of a better environment. This hopeful message needs additional research to confirm or refute.

It seems that the evidence are quite convincing that cultural deprivation and consequent discrimination do create psychological disability which in turn arrests school achievement. But the school is a part of that environment and school integration is a simple and effective method of cultural enrichment. School integration of course represents a partial solution to the problems of under achievement of the deprived.

Everyone is of the opinion that group difference in intellectual activities, affective characteristics, parental expectancies with the terms "Cultural Deprivation" or "Cultural Differences" is an alibi for educational neglect or environmental insufficiency and in no way a reflection of the nature of the educational process, which starts quite early in life in family and later on in school. In a country with wide spread poverty, affective impoverishment ignorance of an effective child-rearing process, it is imperative that the most socially relevant topic for research would be understanding the process through which deprivation or a differences affects adversely the scholastic performances of children belonging to various strata. An outline for a process model approach to research has been suggested by the present author (Panda, 1974). Deprivation is a condition, it manifests in behavioural characteristics through some processes of interaction.

Remedial measures

Certain remedial measures have been recommended. It is true that deprivation does exist among the socially disadvantaged children due to predominantly,

(a) In-adequate early socialisation.
(b) Mark of oppression.

(c) Organic deficits.
(d) Inadequate social environment.
(e) Culture conflicts and educational deprivation.

In order to reverse the ill effects research studies support certainmeasures.

(a) Early modeling and imitation of desirable behaviour.
(b) Language enrichment programme and stimulation at home.
(c) Affective attention and acceptance.
(d) Providing initial success experience to build better motivation and striving for success.
(e) Removal of discrimination attitudes on the part of teachers and other significant members of society.
(f) Humanistic approach to teaching the underprivileged in school.
(g) Instructional programme may be geared to their needs and ability level.
(h) Giving responsiblity, recognition, tangible rewards; positive remarks etc.
(i) Exposure to sensitivity training, exposure to literature, discussion and group contacts, role playing , case conferences relating to their problems.
(j) Presenting learning materials using images, aids, and providing adequate organisers and drill.

Early childhood care and education

The National Policy on Education (NPE) has given a great deal of importance to Early Childhood Care and Education (ECCE). It views ECCE as a crucial input in the strategy of human resource development (HRD), as a feeder and support servive for working women of the disadvantaged sections of the society. It has also taken into account the holistic nature of ECCE and has pointed out the need for organising programmes for the all round development of the child. It specifically focussed on the need for early care and stimulation of children belonging to the vulnerable sector. The importance of community involvement has also been highlighted. Emphasis has been given to establishing linkages between Integrated Child Development Service (ICDS) and other ECCE programmes.

The aim of ECCE is that every child should be assured acces to the fulfilment of all basic needs. As such efforts will be made towards universalisation of ICDS by A.D. 2000. Qualitative improvement of ongoing ECCE programmes would receive high attention. New cost-effective designs of ECCE will also be encouraged and supported.

The ECCE involves the total development of child, i.e., Physical, motor, cognitive, language, emotional, social and moral. The age span under consideration in ECCE is from conception to about 6 years. Even a modest development process during this period includes care of mother during pregnancy ante-natal health check-up, nutritional support, control of anaemia, immunization for prevention of tetanus following delivery etc. hygienic and skilled birth attendance, nutritional care of mother during lactation, correct infant feeding practices, immunization of infant from communicable diseases, mothers' education in the child care, early childhood stimulation, and health and nutritional support throughout. Thus, ECCE is a complex integral function. It requires workers with integrated ECCE training, integrated work sites or ECCE centres where the essential services flow to young children through the period of their growth and preparation for formal education. To tap the full advantage of the synergistic impact of well-integrated ECCE activities and associated programers, efforts will be directed at co-ordinating functioning of various agencies - governmental and non-governmental - striving to meet different needs of young children.

Community and parental participation will be enlisted wherever possible in resource mobilisation, planning, and implementation. To this and village/mahalla level committees with adequate representation of mothers will be organised. The role of capable voluntary agencies will be emphasized to create a wide and rich network of resources for ECCE. At the same time, it is imperative that proliferation of sub-standard institutions of ECCE is discovered. Norms and minimus standards will be devised.

Ongoing programmes/schemes that reflect a concern for the holistic development of young children will be improved to provide effectively integrated services: ICDS, ECCE centres, Balwadis run by Voluntary Agencies, Pre-primary Schools and Classes, Day Care Centres.

Besides strengthening existing programmes, emphasis during the Eighth Plan and thereafter will also be on experimentation for evolving low cost and context specific models. The models which are in experimentation stages, at the moment, would be encouraged and expanded. Appropriate agencies will undertake a survery of such models: Home Bades Model, Day-Care Centres, Family Day-Care Centres. Approximate linkages will also be developed between ECCE, primary schools and Non-Formal Education (NFE) Centres. Two-way interaction between the Anganwadi workers and school teachers/NFE instructors will be encouraged. Suitable space will be provided for ECCE close to primary schools.

In all models of ECCE programmes, the component of training will be strengthened. Training would include a strong commponent of field placement under supervision. As the early childhood care and education programmes are bound to expand considerably over the next two decades, corresponding training facilities will be available for all levels of functionaries. Following would be some of the important parameters for meeting the training requirements :

- Initiating a two year vocational course in ECCE at +2 level with the objective of creating basic skills which can later be adopted through job training for specific situation.
- Strengthening the educational content of ICDS functionaries training by providing appropriate training inputs, resources, materials etc. and extending it, where possible, to include a component on day care.

The component of pre-school programme should provide inputs for a total development of child faculties. This would mean providing components of health, nutrition and education.

ECCE aims at achieving total development of the child e.g., physical, motor, cognitive, language, social, moral and emotional. Specifically, (1) it must cover the period from conception to six years (care of mother during pregnancy, nutritional care of the mother during lactation, feeding proctices. immunization of children, communicable diseases, mother's education in child care); (2) focus on early childhood stimulation, health and nutritional support; (3) establish pre-primary education as a strategy for smooth transition from home to school; (4) providing home stimulation and care to children who are potential first generation learners; (5) function as a support service for working women of the disadvantaged section of the community; and (6) ensures community involvement through participation and voluntary efforts.

Every habitation having a population of 300 or more will have ECS/ECCE centres. In habitations having a population of less than 300 the primary school teacher/NFE worker will manage the ECS/ECCE Centres with extra remuneration. While implementing ECCE programme General Economic condition of the community as a whole and family in particular has to be taken into account. The personnel attached to such centres will be given specific training for undertaking different activities. In the scheme of expansion priority will be given to underprivileged groups mentioned below : (a) Very poor urban slums; (b) Ecologically deprived areas, i.e., tribal belt; (c) Rural areas; (d) Mobile workers in urban areas; (e) Nomadic communities; and (f) Remote hamlets.

Components of ECCE programme would include : Health, nutrition and parental care: Education through play, language training, motivation training, compensatory programmes; Family life education and parental awareness; and Exposure to a variety of experiences that foster a sense of joy and curiosity.

Convergences of services

(i) ECCE Programme will be co-ordinated with ICDS. Duplication of services in a locality will be avoided. Pre-school education componend of ICDS will be reinforced.

(ii) ECCE Centres under the Department of Elementary Education will incorporate health and nutrition programme. Supply of educational kits, using play techniques will be ensured and early teaching of the 3 Rs will be discouraged.

(iii) *Integrated Balwadis* by voluntary agencies. The Balwadis will follow ECCE pattern of functioning, for widening the focus on health, nutrition, and education. Support service may be augmented subject to monitoring of minimum qualities and avoidance of duplication.

(iv) *Pre-primary Schools* attached to Government/NAC/ Muncipality. These schools also will fall in the line with the integrated approach and will refrain from introduction of 3 Rs. Home and Community relationship will be strengthened and nutrition component will be added.

(v) *Day care centres:* There is a need for strengthening such Centres wherever they exist. This will relieve workers and women and as such need to be located in construction sites by voluntary agencies.

The Village Education Committee in charge of primary education in all cases will be in charge of ECS/ECCE Centres. The committee having fair representation of women may discharge the following functions : Selection and appointment of Sevikas; Ensuring enrolment and participation of the children in the 0-6 age group; Provision for construction of low cost buildings for the centres; Organising meetings of women for motivating them to participate and help to run the centres effectively; Financial support may be provided by different agencies but the management at the village level shall be made responsible for the effective functioning and accountability; There will be a single window delivery system at the grass root level irrespective of funding agencies; Regular induction and inservice training programmes are to be conducted at DIET, Women's Training Centres as the case may be; Department of Pre-School and Early Childhood Education at the SCERT to cordinate, plan and evaluate ECCE programmes in the State taking into consideration review committee report regarding implementation mode and staffing will be created; and Supervisors are necessary to monitor and evaluate the centres at the rate of one per G/P. /10 centres.

The content of pre-school programme should provide inputs for a total development of child faculties. This would mean providing components of health, nutrition and education.

Daily activities should be planned according to the age and developmental level of the children. There should be a flexible balance of activities for all aspects of development as well a balance between individual and group activities, indoor and outdoor activities, vigorous and quiet activities and guided and free activities.

A common curriculum of activities shall be followed taking cultural life of the community into consideration. This needs to be developed by SCERT, Elitist pre-school concept will be discouraged.

School integration *vs* segregation

There is evidence to suggest that Black students from the segregated schools do not feel quite at home in the integrated settings. He further stated that Blacks have reservations and concerns regarding peer acceptance, fairness of White teachers, and achievements in the classrooms. Teachers of Negro students reinforce negative self images through words and deeds.

Contrary evidence also exist where Negroes do not score less in IQ than Whites in integrated settings but scarce comparatively less in segregated settings.

Such segregated schools on the basis of ethnicity are not found in India but there are schools were children predominantly disadvantaged children study and in others where the schools are mixed. In such situations the social disadvantaged nourish feelings of self depreciation. This is internalised. They feel that they are good for nothing. These feelings slowly and surely inhibit their growth and functioning. Little attention has been given to change such a school climate to the advantage of the disadvantaged through intervention. Integration is merely physical. What kind of change should be introduced to benefit the disadvantaged. Can a better organisational climate in school change the lots of disadvantaged?

Pande and Tripathi (1982) have made an made an attempt to study scheduled caste students in High caste school in relation to their motivation and academic achievement. Indian schools represent middle class values and the scheduled caste child fits very little with the school wants and climate. There is very little of climate supportiveness rather as Rosenthal and Jacobson (1968) would prove expectancy and self fulfilling effect which acts as a disadvantage to a disadvantaged learner.

Teacher's praise and approval enhances self-regard and give rise to high academic achievement. Coleman et al. (1966) have stated that correlation of pupil achievement and the behaviour of teachers and fellow pupils is higher for Black than that for Whites. A number of studies have shown that the achievement of the minority group is depressed because there teachers do not expect them to perform well . Negro achievement is a little raised in segragated settings. Hence, teacher behaviour is a significant factor in integration vs. segregation issue of the disadvantaged.

Peer group relation have been found to be closely related to attainment. The students who come from lower class find little support from middle class peers. This explains disadvantaged group to stay in then own setting no matter how deprived it is but it is emotionally supportive. They do not feel the middle class school as their own. Hence, they do not show any belongingnes. Integrated schools tend to lower the self-concept of lower class children.

Pande and Tripathi (1976) studied the perception of 108 -

54 SC and 54 non SC children drawn equally from a mixed school and Ashram school, 20 each from class VIII, X and 14 from class VI matched on intelligence.

Climate supportiveness (perceived teacher expectation, peer group acceptance, home environment) measures were studied in relation to academic self concept, n-Ach, and fear of failure. The basic findings of interest in the context of integration were;

(a) Climate of the minority school was perceived more supportive than the climate of the majority school.

(b) Non SC students perceived their school climate more supportive than SC students.

(c) Sc students found minority school supportive to a greater degree in comparison to the kanority school.

(d) Mean scores for SC students in the majority school was considerably lower than their score in the minority school.

(e) Academic self concept of the SC students was markedly low in the majority school than in minority school.

The evidence supports segregation than integration. But correspondingly if integration has to be ensured their is a need to build up these climate factors. The study offered enough clue to design intervention strateges, which is a major challenge.

Rath (1975) showed that cognitive growth can be accelerated with the help of various techniques of reinforcement and perceptual training. In view of diverse societal and ecological conditions the problem of deprivation and enrichment in India has to be tackled in a different manner. This question requires serious thinking.

Hunt (1961), while challenging the concept of inflexibility of intelligence, stressed the effects of experience on both intelligence and development. His analysis supported the need for early school intervention to compensate for the inadequacy of experiences in the low SES homes.

The literature of the last decade reflects a good deal of skepticism with regard to long term benefits of these compensatory programmes.

SCHOOL INTERVENTION

Achievement responsibility

Several interventions have been tried out under the guidance of the author not as educational measure but for ability and character document. Ray (1982) did a study on "Effect of Attribution Training on the Development of Intellectual achievement responsibility and Cognitive Performance Among Lower Class Children" under the guidance of the auther. The major objectives of the study were :

(a) to measure intellectual achievement responsibility of low income group elementary school children reading in class-III, and Class-IV,

(b) to introduce intervention programme at four different stages which are equally spaced in terms of time,

(c) to observe if changes in the attribution process have significant relationships with mental ability, cognitive competence as recealed by academic achievement and other related attributional processes.

The sample consisted of 200 (100 boys - 100 girls) children in the CA range of 9-10 reading in Class III & IV in three elementary schools in Cuttack city. The children from each class and sex were equal in number. They all came from the families of poor socioceonomic homes. The children were randomly assigned to the treatment and control group.

Pre-test measures were obtained using Intellectual Achievement Responsibility Questionnaire for children, Bialer Internal external locus of control scale, Robinson's n-ach, questionnaire, Raven's coloured progressive matrices, self-concept, and school achievement tests. Training was phased into four stages: story telling, feeling of self-esteem or self perception, goal setting through achievement games and Discrimination Task Training. Each training phase continued for 30 days followed by a post-test. The training programme was composite but the post- tests were taken to observe systematic change if any depending on training using the additive model. Training was given in separate classrooms for the experimental children and during these periods the control group children were asked to attend their normal classroom teaching. Post-test measures were obtained on each of the measures included in the pre-test session.

The results obtained were :

(i) The distribution of IAR scores during the pre-test condition resembled a fairly normal distribution as measured by test of goodness of fit.

(a) Intervention programme produced significant changes in IAR, IAR (success), IAR (failure), related attibutional processes (self-esteem, I.E. control, n-ach); mental ability and school achievement.

(b) There was significant variation in attributional process scores, mental ability and achievement from phase-I of the post-test through phase-4, with only exception to self-esteem.

(c) There were significant interactions between treatment and post-test sessions on each of the variables, the interaction being ordinal in nature. At each level of post-test, the experimental group of children had higher scores than that of the control group children.

(d) Changes in IAR was related to IAR for success, IAR for success was not related to IAR for failure, self-esteem, n-ach and was negatively related to mental ability and school achievement both in the control and experimental group; IAR for failure was not related to any of the variables included in this study both under control and experimental conditions; generalised I-E control positively related to self-concept of the experimental children and negatively related to school achievement whereas for the remaining variables the relationship are not significant; self-concept was significantly related to mental ability, n-ach and school achievement, n-ach was only moderately related to mental ability and school achievement; and relationship between mental ability and achievement was positive in all cases. However, the relationships were interpreted with caution and further research is necessary, for establishing more direct conclusions.

The results on the effect of intervention programme were very straight forward and conclusive.

What does it tell to the teachers?

The results of the study are educationally meaningful and sound. The suggestions that emerge from the observations can be translated into action through teacher behaviour and pupil reactions. In a classroom situation, especially when children are externally oriented, lacking in positive self-concept, and high n-ach, they can be told success stories emphasizing self-attribution, causality, and objective perception of self. They can be made to feel the worth of success through games, set their goals, discriminate tasks and know that success depends on effort than on change. May be in a regular school emphasis on teacher behaviour emphasizing and pointing out the effect of effort on the part of the pupils would seem to be a good strategy for increasing mental ability and school achievement. An excursion into the tasks used in this study would help a teacher to develop his own skills and competence in devising tasks used in this study would help a teacher to develop his own skills and competence in devising tasks for helping the children to increase their internal responsibility and success in academic tasks. Such a focus can be provided by each elementary teacher no matter whether the children are drawn from deprived settings, normal settings or enriched settings, since these attributional characteristics which are developmental in nature and the process of development can be accelerated to a considerable degree. Of course, for deprived children the need is more obvious.

In our school system this practice may prove more useful because what goes on usually in our classroom can be categorized as chance oriented behaviours and a tendency to conform than to see more into it and try to succeed.

Analytic ability development

Dash (1982) conducted a study on "Effects of Certain Problem Solving Strategies Upon Development and Persistence of Analytic Ability and Cognitive Functioning Among Elementary School Children", under author's guidance. The objectives of the study were: to measure the cognitive style of elementary school children; to demonstrate the effects of problem solving strategies, decision on making, simultaneous scanning, successive scanning, conservative focusing and focus gambling on the modification of this style; to examine the persistence of the effects; and to validate the finding against the measures of reflection-impulsivity, school achievement, simultaneous processing habits, and concept learning.

The subjects of the experiment were ninety boys (average age 87.6 months) of class III of the Orissa State Electricity Board M.E. School. The subjects were randomly assigned to the five treatment and one control group. Each group had 15 subjects originally but it was reduced to 14 at the end of the experiment. Thus 84 students were finally included in the experiment.

The design of the experiment was standard Pre-Post Test control group design in which there were five experimental and one control group. The independent variables were the five methods of instructions using one or the other information processing strategies. The dependent variables were the children Embedded Figure Test, Mat ching Familiar Figures Test, Achievement Test, Figure Copying Task and Tasks of Concept Verbalisation. The tools used in the study included the test materials, training materials and training lessons. The tests consisted of children Embedded Figures Test, Matching Familiar Figures Test, Achievement Test, Figure Copying Tasks and Tasks of Concept Verbalisation. The instructional materials were prepared on the basis of five information processing strategies in relation to each of the 30 training exercises. At the beginning of the experiment, the tests and tasks were administered to all the six groups of children. These scores were tered pre-test scores. This is followed by a training period of 45 days necessary to complete 30 exercises for the five experimental groups of children. The control group received no training. At the end of the training again the tests and tasks were administered. The score obtained were called post-test scores. Then a gap of six months was allowed in which the children were left to themselves. After six months of gap again the tests and tasks were administered. The scores obtained are called retention post-test scores. The true gain scores were calculated for each of the lest scores by eliminating the regression effects, while absolute difference scores were calculated for the task scores.

The results of the study revealed the accuracy of measurement of cognitive style of elementary school children at different occassions. Moreover, the distribution of scores of cognitive style tests as depicted by CEFT in akin to normal distribution. The results further show the usefulness of adopting the five information processing strategies onthe modification of cognitive style of these children.

The decision making strategy is found quite effective in modifying field dependence among elementary school children. The children trained in using this strategy not only showed better performance in the CEFT scores, but they exhibited more or less similar performance in measures of school achievement, MFFT (time) and tasks of concept learning. Moreover, the modified effects of this strategy on the field dependence and the above measures are durable in long run. However, this strategy is not found effective in modifying MFFT (error) cores, scores of figure copying tasks and functional concept learning scores.

The simultaneous scanning strategy is effective in modifying field dependence as well as school achievement, simultaneous processing habits and concept learning behaviour. The effectiveness of this strategy is found to be durable in modifying field dependence, school achievement and concept learning. However, this strategy is not found effective in modifying MFFT (errors) scores of figure copying tasks and functional concept learning scores with respect to both response time and errors scores.

The strategy of successive scanning is found moderately useful in modifying field dependence as well as school achievement and concept learning tasks. The modified effect of this strategy on the above measuress persists for long. This strategy is not found effective in modifying impulsive behaviour in respect of both response latency and error scores.

The conservative focussing strategy is observed to be effective in modifying field dependence. The children using this strategy also showed better performance in scores of MFFT (time), school achievement and concept learning tasks. Moreover, the modified effects of this strategy is found to persist over time in respect of field dependence, impulsivity, school achievement and in learning of concepts. However, this strategy is not found effective in modifying the MFFT (error) scores as well as scores of figure copying.

The strategy of focus gambling is found quite effective in modifying field dependence. The use of this strategy is also found to be effective in modifying impulsive behaviour, school achievement and in learning of concepts. Moreover, the effects of this strategy is found to be durable in modifying field dependence as well as impulsive behaviour whereas its effect is temporary in modifying school achievement. This strategy is not found to be effective in modifying MFFT (time) scores as well as the scores of figure copying tasks.

On the basis of this experiment, it was found that the field-dependence-independence cognitive styles are subject to modification, and that this modification can be brought about in the majority, of the elementary school going children by short-term training in the form of classroom instructions and exercises.

Cognitive style of children at the moment appears to have clear implications for educational practice. The most important for the issue of cognitive styles is in the performance across tasks in which the surrounding organised field has influenced the child's perception of an item within it. That is the reason why children who are more field dependent are better in learning the social materials like social studies and languages, than their field independent peers; however, these two groups of children are not basically different from each other in sheer learning ability or memory. To the extent that the inferiority of field independent children with such materials is a functions of lack of attention, and fixed mental set, rather than lack of ability, their performance can be made equivalent to that of field dependant children by adopting the specific information processing strategies. The evidences suggest, that field independent children tend to learn more than field dependent children under conditions of intrinsic motivation. However, if these field dependent children are taught through the use of information processing strategies, it is expected, that these children develop more insight into the subjectmatter and thereby develop more and more intrinsic motivation similar to their field independent peers. Frequently in learning, the materials to be learned lacks clear inherent structure, and it requires organisation as an aid to learning. Field dependent persons are likely to have greater difficulty in learning such materials. The field independent children are more likely to provide the mediating structural rules that are needed to facilitate learning. The instructional processes, using the five information processing strategies, develop the habit of organisation and structuring the complex pattern throughout the training programme. It is, therefore, quite likely that children, trained in the stratetgies of information processing, learn how to organise and structure the materials to be learned. When this ability is developed through training then the field dependent and field independent children are not likely to differ in their learning. It appears during training that some children experess their need for external provision of structure. This suggests that the teachers should recognise such children and adopt the specific information processing strategies to help such children organise and structure the learning materials.

There is still another line of evidence which suggests that field independent persons are more likely to use mediators of their own design, in dealing with learning tasks, whereas the field dependent children depend on the characteristic of the learning task. This evidence comes from the studies of concepts. The children form a hypothesis as to what the concept may be and then they test the hypothesis by applying it to exemplars of the concept class. If the hypothesis is not correct, a new hypothesis is formulated. This involves the use of information processing strategies. The present study suggests that when proper use of the information processing strategies are made, then field dependent and field independent children are not likely to differ in search for the correct concept.

In the process of formation of hypothesis about the nature of the concepts to be learned, noticeable cues are, in general, more likely to be used than cues that are not very noticeable. It is known that concepts defined in terms of more salient cues are generally easier to learn than concepts defined in terms of less salient cues. Field dependent children are responsive to the dominant arrangement of the field as given and are not very likely to depart from that arrangement. These children when exposed to information processing strategies of the kind used in the study, are able to give more attention, change their fixed mental sets, and are in a position to focus the positive instances more fully. The instructional procedures of this kind will surely help these children until they reach some criterion of success in their guesses. The children trained in this manner will tend to sample more fully from the array of cues objectively available for concept definition on the basis of this cue sampling behaviour. The children exposed to the information processing strategies are expected to learn concept more rapidly. On the parts of the teachers and parents the relationship between field dependence-independence and concept attainment is very important, because of their interest in having children learn concepts, rather than facts alone. The information processing strategies found effective in modifying the cognitive style of children may aid to overcome their domination by salient cues. It is quite reasonable to expect that as teachers become more aware of the ways in which relatively field dependent and field independent children learn concepts, they may become more effective in adapting instructional procedures to the needs of these kinds of children. Beyond encouraging teachers to adopt their teaching to students as they find them, it may even be hoped that teachers find ways of helping students diversify their learning strategies. The findings of the present study give some encouragement to this hope.

The effectiveness of the information processing strategies on the modification of field dependence suggest improvenent not only on the teaching methods of teachers, but the change in their attitudes, beliefs and expectations as well. If a particular teacher finds some children not showing better performance in abstract nature of contents, then he may take recourse to various problem solving strategies suitable for the purpose. Similarly if one finds the children weak in materials involving social orientations, then he may attempt to follow a strategy in order to provide more organisation into this content. The subject teachers may feel that informing the children when a response was incorrect, in addition, telling him why it was incorrect and finally adopting a strategy within the perview of the material presented will be effective in enhancing children's learning. Obviously, correct feedbacks are provided to the children by the traditional pattern of teaching. However, it is quite likely that if the proper strategy is systematically followed in addition to the existing approaches then, the performance of children will be much improved. Sometimes it is observed that teachers become hostile towards some children while dealing with the learning tasks.

Anxiety, classroom learning and adjustment

Mohanty (1984) did a study on "Effects of State-Trait Anxiety on Classroom Learning and Personal Adjustment of Elementary school Pupils" under the supervision of the author. The following problems were investigated.

(a) The incidence of state-trait anxiety among elementary school children, and to find out relationship between pupils, anxiety with pupil adjustment, intelligence & performance.

(b) The formulation of the application of certain cognitive instructional materials to reduce pupil-anxiety in the classroom and study the effect of such intervention programme upon their adjustment, intelligence, and classroom achievement.

In the first phase, in order to find out suitable anxiety instrument which is sensitive to group differences, the A-trait scale, A-state scale, CASC and TASC were administered over 150 students, 30 each from classes III to VII. On determination of the psychometric properties of the four anxiety scales, the A-trait and A-State scales were found suitable for use in the present study.

The design of the experimental study was a Pretest-Posttest-Control group design. 370 children, 37 each from class III to class VIII were included as subjects in this study. Children were assigned to the Experimental and Control group using yoked matched procedure for each class level on state and trait anxiety scores.

The State-Trait Anxiety Inventory for children, Pre-Adolescent Adjustment Scale, Raven's Coloured Progressive Matrices and Achievement tests in arithmatic, M.I.L., and Science separately for pretest and posttest designed by the investigator and the Teacher Rating Scale were used in the present study.

The anxiety scales, A-Trait, A-State, GASC and TASC showed a high degree of split-half reliability. Children at elementary school stage showed the experience of trait and state anxiety distinctly. Trait anxiety level was higher than the state anxiety level with children at all educationals There was also the difference between these anxiety scores of children varying in educational levels. Children's GASC scores were higher than their TASC scores. There was no interaction between general and test anxiety and educational level. Both trait and state anxiety had significantly negative relationship with adjustment of elementary school children. There existed a low negative correlation between trait anxiety scores and intelligence test scores of children at the elementary school. Similarly a low negative correlation between their state anxiety and intelligence. was found. Trait and State anxiety both were negatively related to academic achievement of school children. Anxiety level of elementary school children reduced as a result of intervention. Intervention programme improved the adjustment and academic performance of children at the higher levels of school by reducing their level of anxiety. There was no difference between anxiety scores of children varying in educational levels.

Results were interpreted in terms of Spielberger's (1972a) theory of State-Trait anxiety and related studies in the area.

The early school years, ages 6 to 11 have been recognised as very crucial in one's life. They are the years during which the child develops feelings of 'industry' or 'inferiority'. It is in these years that the child learns to relate to peers, to play by rules, and to perform academic tasks. Reward for learning and assistance in learning lead to industry. Excessive criticism and high standards of instruction, on the other hand, lead to feelings of failure and inferiority.

Further, in the primary schools in India, the dropout rate is very high, Children at this level dropout on economic as well as psychological grounds. The school elimate fails to meet their psychological needs. Lack of reward in learning and roper attention from the teachers create a repulsive attitude towards school and school learning among young children. Severy punishment by the teachers makes them fearful. Children at this stage have also various kinds of irrational beliefs and fears towards enimate and inanimate objects. These factors combinedly contribute to the development of anxiety in school children. The findings report the presence of anxiety in elementary school children. Anxiety is harmful in its effects on the development of personality and cognitive characteristics. This is also reported in this study that anxiety adversely affects school performance and personal-social adjustment. High anxiety leads to poor academic involvement. Since we need that the primary education should be universal and successful without any dropout, care should be taken the children will not develop frustration and anxiety while in school.

Curriculum, method of instruction, text book, classroom environment and evaluation procedure should be chosen keeping in view the children's abilities, interests and maturational factors so that they will not contribute to the development of anxiety. Teacher-pupil relationship is a very significant factor in this context. Warm and affectionate behaviour of the teacher helps in proper emotional development in the child. The study revealed that anxiety has a negative influence upon adjustment. Excess anxiety at the early stage gradually leads to personality disorders in later life. Therefore, teachers should be sympathetic affectionate and loving to the children.

Inspite of various preventive devices, there are enough chances for the children to experience anxiety. In such cases, we are in search of a means through which children's anxiety could be reduced. There are various techniques developed by the researchers which can be utilised for reduction of anxiety. Study counselling, providing memory support during the examination, reassuring the child that high examination mark will not be considered for the evaluation, training the child to concentrate his attention on the task at hand through exhibition of models, desensitization, programmed learning, cognitive therapies like selfinstructional training for developing insight into one's maladaptive thoughts, self-verbalization, external verbalization and many other techniues have come up. But none of the techniques is suitable for the teacher to use along with his daily instructions in the classroom. Moreover, children of elementary school are not able to be subjected to self-instructional training or evaluate their anxiety level or capable of self-verbalization. Therefore, it is the teacher who will have to restructure their irrational thoughts and he will have to do this along with his daily routine instructions inside the classroom. Hence, we are in dearth of a more suitable and easier method of reducing young children's anxiety. At this juncture, the story telling technique of cognitive mediation warrants consideration. The findings suggest that the story telling technique of cognitive mediation could be fruitfully used as a method of anxiety reduction. This observation might suggest some concrete solutions to the educational administration to control the dropout rate at the primary school level.

Creative thinking ability development

Dash (1992) conducted a study on "Development and Persistence of Creative Thinking Abilities in Tribal Children as a Function of Cognitive and Affective Intervention" under the supervision of the auther.

The objectives of the study were :

(i) To devise a training programme for developing creativity of tribal children.

(ii) To investigate whether the training programme has any effect on the development of creative thinking.

(iii) To investigate whether the changes that are the result of the training programmes are permanent or temporary.

(iv) To study whether cognitive or affective aspects contribute more to the development of creative thinking.

(v) To investigate whether level I (divergent functions), level II (complex thinking and feeling process), or level III (involvement in real challenges) contribute more to the development of creative thinking.

vi) To study interaction effect of both cognitive and affective aspects, and level I, level II, and level III or the training material.

The design of the study was 3 x 5 factorial design with repeated measures on second factor. The first refers to the type of training groups and has 3 levels (control, experimental group I and experimental group II). The second refers to the posttesting conditions and has five levels. There were 20 subjects in each group.

The samples of the study were selected from Class V of different tribal schools of Sambalpur district in the State of Orissa.

In order to assess the different variables included in the study, the following tests and training materials were used:

1. Torrance Test of Creative Thinking for assessing creative thinking.
2. Training tasks or programmes for developing creative thinking.

The study aimed at developing an integrated programme of training to develop creative thinking in tribal children. The training programme was based on Treffinger's model of creative learning (Treffinger, Isaksen, & Firstein, 1982). The model included three levels of creative learning with consideration of both cognitive and affective dimensions at each level. The three levels were (i) divergent functions (ii) complex thinking and feeling processes and (iii) involvement in real challenges. There were 60 items, 30 on each aspects and 10 on each level on which training programme was made.

The study was a pre and post test, experimental and control group design. First of all, Torrance test of creative thinking both verbal and figural Form A were administered to 60, class V tribal children as a pretest. After the selection of sample, the children were divided randomly into three groups: (i) Control group (ii) Experimental group I and (iii) Experimental group II. In each group, there were 20 children. The control group was providing with n otraining and the experimental group I was provided with training on cognitive aspects for one month, and experimental group II was provided with training on affective aspects for one month. Torrance test of creative thinking both Figural and Verbal Form B were given to children after each level of training, immediately after the training and after one month of interval. The responses were scored strictly according to the direction manuals and scoring guide. Results were analysed taking means and standard deviations and using a 3 x 5 factorial analysis of variance with repeated measures on the second factor, and Newman-Keuls test.

The findings of the study revealed that the control group and the experimental groups were more or less comparable in their fluency, flexibility, originality, elaboration and on total scores of Torrance test of Eigural Creativity Test, Form A, and they were also comparable in their fluency, flexibility, originality and on total scores of Torrance test of verbal creativity test Form A in preintervention condition.

The analysis of variance revealed that the intervention training was found to have a significant facilitatory effect on the fluency, flexibility, originality, elaboration, and on total scores of Torrance test of Figural Creativity Test, Form B. The intervention training also have a significant effect on the fluency, flexibility, originality and on total scores of verbal creativity test, Form B.

The Newman-Keuls test revealed that the performance of the experimental groups receiving training on either aspects of creative thinking is significantly better than the performance of the control group reveiving no training. The test also revealed that the experimental group I which received training on cognitive aspects was found to be superior to the experimental group II which received training on afective aspect of creative thinking in all the tests of verbal and figural creativity tests. The Anova also revealed that the post-testing conditions have significant differential effects on the fluency, flexibility, originality, elaboration and on total scores of figural creativity tests and fluency flexibility. Originality, and total scores of verbal creativity tests. The performance of the children, irrespective of groups, differed significantly over five testing conditions. The performances of the children increased from first to fifth post-testin g conditions. A significant persistency effect of intervention training on creative thinking abilities was also found.

The Anova also revealed a significant interaction effect of treatment groups X posttesting conditions in all the tests of creative thinking. The performances of children had rapidly increased in all the five testing conditions from control group to experimental group I and it decreased thereafter in case of experimental group II. The children of experimental group I showed maximum increament in all the aspects of creative thinking in five testing conditions in comparision to the control and experimental group II children. Similarly, the performances of children of experimental group II were superior to the performance of control group children. Moreover, the performances of children in the third level of creative thinking are better than the first and second levels of creative thinking. On the basis of the results of the present study, it is concluded that intensive creative training can produce better effects in the cases of disadvantaged children. Training on higher levels of creative learning is-more effective than onthe basic and primary levels of creative learning.

Strength of the disadvantaged

Kaul (1989) explored the cognitive and socioemotional strengths of the socioeconomically disadvantaged children in terms of field independence, visual modality preference, creativity, cooperation, dependency, dealy of gratification, intelligence. Stratified purposive sampling was done to get contracting SES groups. Fathers' occupation and education were the criteria for deciding SES category. Low SES (illiterate to middle class, semi-skilled and unskilled workers), Middle SES (10th class to B.A./B.Sc., Clerical job, technicians etc.) and High SES (post graduate level, professional law etc. Professional executives).

The following tests were administered. Culture Fair Intelligence Test, Scale 2, Children's embedded figure test, adopted version by Sinha, D. Digit Span Test, Torrance test of Creative Thinking with Pictures, maximizing difference game, Dependency Test, Delay of Gratification Test were used on 300 children.

The study is not one in the field of intervention but it has implication for school intervention. Hence, on the basis of results obtained in the study the following suggestions have been made. The results have been described in a different chapter in this volume.

The learning methods to be used with these children should be conducive to their field dependent cognitive style. Because of field dependent nature they respond to social stimuli rather than non-social stimuli. They are more attentive to the social stimuli. This idea can get into designing the curriculum, preparation of text books, classroom interactions, in schools for the disadvantaged schools (Witkin, et al. (1977). In the classroom situation therefore, a generous use of external reinforcements and constructive criticism, would pave the way for better learning of these children. They need relatively more explict and structured instruction in problem solving strategies, more clearly organised material for learning & moer exact definition of the performance. A spectator approach for teacing concepts than hypothesis approach. Teachers while teaching reading shoud use word method, sentence method, story method rather than restricting to phonetic method. They should use more charts, aids and drawings to ensure efficient learning, particularly in the primary grades. Teachers should give due recognition. Since low SES children are more cooperative system in school use 'learning through teaching' group projects, and activities as viable alternatives to teaching. Cooperative learning, self minority of activities and self reliance can be tried to build confidence. Delay of gratification is a situation specific phenomenon and is determined by a number of situational variables.

Teaching and guidance

These are a but few directions which need be examined carefully through studies and be built into the educational strategy for the education of the underprivileged, so that they did not become victims of cumulative deprivation or the 'Broomstic effect'.

What is needed now is our schools and educational systems must develop a better understanding of the implications of the social and psychological dynamics of deprivation and translate this understanding into educational programmes, into the training of teachers and administrators and into planning of curriculum and instruction. No single device will suffice to counteract or to remedy the complex factors, those associated with the education of the underprivileged. Administratively the problem can also be taken care of by dealing with acculturation problems and school learning by providing early school experience to those children and following an ungraded sequences or multiple entry system. To unlook the hidden potential among these children, a radical change in curriculum and teaching is required. Atleast the new curriculum which has been introduced is constructed in such a way that it is related to the psychological realities of the child, is tuned to our social and community life, is geared towards achieveing needs and aspirations of our people and the educational climate that is promulgated in the frame-work is more motivating in terms of teaching techniques for which orientation of teachers are conducted in a massive way be the NCERT, SIE and State Deptt. of Education. In a nutshell it is possible to conceive of education as a countervailing force to overcome the deficits accumulated in underprivileged groups or what is currently understood as the broomstick effect. It is true that it is not the educators function only to reverse the negative impacts of educational deprivation, social and effective insulation, caste discrimination and economic deprivation. It involves all aspects of the community. The task surely calls for creative innovation all along the line. The crucial pedagogical problem involved is that of understanding the mechanism of learning facility and learning dysfunction and applying this knowledge to optimum development of a heterogenous population characterised by differential backgrounds, opportunities and patterns of social and intellectual functions.

Then what do the psychological studies on deprivation tell us and what course of action is suggestive from these generalisations? Deprivation does exist among a larger section of student community wheter we call it as due to inadequacy of early socialisation, organic deficits, mark of oppression, inadequate social reinforcement, culture conflicts and educational deprivation. The various studies that emphasise population characteristics underlining deprivation at the same time agree on the complex interplay of various intervening processes (Panda, 1974) in causing the performance deficit of the underprivileged children.

A large body of literature deals with trainability of intellectual function and reversibility of early deprivation which was in fact, the concern of Binet and Montessori since a long time. There is little research to support that intellectual functions contiunues to be malleable into adult periods of life and compensatory programmes are myth. While this may be true largely, it is possible to accelerate the educational achievement of the underprivileged if we attack the issue from a more affective and interpersonal relationship angle. In fact, all learning occur in an emotional climate and this is more so far the deprived or underprivileged. Zigler attempts to account for the changes in the affective state (motivation, task involvements etc.). Affective processes are more manipulable than cognitive processes and as such use of social reinforcement giving attention and approval, building positive expectancies through initial success, elaborative comments and praise, non-verbal attention through a smile, do in fact improve cognitive performance (Zigler, 1966; Panda, 1971; Panda and Lynch, 1972 and Panda, 1974).

An area of research in which data re-available is the desegregatic of underprivileged children into a separate school system, special school and rural schools, Consistently poor children attending school in poor neighbourhood tend to display poor neighbourhood and to display poor achievement. Achievement levels raise with desegregation and it also brings about overall increase in quality of education throughout the system. Of course, in our society segregated classrooms are not available for the underprivileged but there are schools in rural areas which represents the ecology of a special school. Ashram schools and schools where minority group children are few in a regular school. In such schools, the teachers do hold stigmas and try to have their self-fulfilling prophecies achieve. The belief that "he comes from a SC/ST, or his parents are labourers and that he cannot learn", this attitude of teachers is detrimental to the educational growth of underprivileged. Hence, each teacher must deal with all student population in equal manner and try to foster their curiosity, creativity and make them all active participators in the teaching-learning process. Teacher's behaviour that is warm, permissive and encouraging can attract underprivileged to the school. The whole educational process has to be humanised and building up of interpersonal relationship can effectively contribute to academic exchange and improvement. Teachers can make a different in the life of the pupils and more so in the life of the underprivileged. We have to engineer what this difference ought to be in our policy, planning and implementation of an educational programme.

For the most part, education of the socially disadvantaged children can be speeded up by dissemination appropriate method of child rearing systems and values among the parents much before the child comes to school. This will definitely reduce the discontinuities in the norms of children and norms of school. In contrast to the varied, detailed and sometimes adequately designed studies and their reports, it is strange that we psychologists in this country do not take these generalisations to the reach of the common man who contribute to a great majority of the disadvantaged children in school.

Current programmes favour two methods of meeting the problems : preschool intervention and remediation of reading and language skills. The programmes must therefore concentrate on grade levels at which deficincies in these skills being to seriously affect the academic performance. Intervention to compensate for a variety of deficiencies can not stop with preschool age children. It is necessary to define many elements of the curriculum, instruction, and approach to learning. Schools must develop a better understanding of the implication of the social and psychological dynamics of cultural deprivation and translate this understanding into educational programmes, curriculum and instruction. There problem is complex and serious and there is no single principle governing the programme building for the educationally and socio-culturally disadvantaged child. Materials and methods of teaching need to be aligned with the psychologically reaslties of culturally disadvantaged children.

Highlights

Previous researches have shown that ill effects of deprivation are reversible if tried early and on a long term basis. On the basis of research evidence these interventions have been introduced at preschool level (e.g., learning readiness, information processing, social learning, building self-esteem). Basically preschool programmes should stress perception, sensory stimulation, language and information processing habits. School programmes must concentrate on remedial measures, ECCE, integrate enrichment programmes in basics, specific psychological interventions, and specific self instructional programmes capitalising on the strength of the disadvantaged.

REFERENCES

Bloom, B., Davis, A. and Hess, R. (1965). Compensatory Education for Cultural Deprivation. New York: Holt, Rinehart and Winston.

Cohen, S.A. (1969). Studies in visual perception and reading in disadvantaged children. Journal of Learning Disabilities, 10, 498-507.

Coleman, J.S. et al, (1966). Equality of education Opportunity, Washington DC. Dept. of Health, Education and Welfare, US Govt. Printing Office.

Crain, R.L. and Wiseman, C.S. (1972). Discrimination Personality and Achievement. London, Seminar Press.

Dash, P. (1992). Effects of certain problem showing strategies upon development and persistence of analytic ability and cognitive functioning among elementary school children. Ph.D. Thesis, Utkal University.

Dash, S.K. (1992). Development and persistence of creative thinking abilities in tribal children as a function of cognitive and affective intervention. Ph.D. Thesis, Utkal University.

DeCecco, J.P. (1968). The Psychology of Learning and Instruction. Prentice Hall, New York.

Deutsch, M. (1964). Facilitating development in the preschool children; Social Psychological Perspectives. Merril Palmer Quarterly, 10, 249-63.

Hunt, J. Mc V. (1961). Intelligence and Experience. Ronald Press, In Wiseman, S. (Ed.), (1973). Intelligence and Ability, Penguin Books, 333-376.

Kagan, J. (1975). Can children come back after a poor start ? Carreigie Quarterly, 23, 3, 67.

Karnes, M.B. (1958). The effects of various preschool intervention programme. AREA Convention, Feb. 10, Chicago.

Kaul, V. (1989). Strength of the disadvantaged. Delhi : Northern Book Centre.

Mohanty, C. (1984). Effects of state trait anxiety on classroom learning and personal adjustment of elementary school pupils. Ph.D. Dissertation, Utkal University.

National Policy on Education, MHRD, Govt. of India, New Delhi, 1986.

Panda, K.C. (1971). Problems of Tribal Education: Some enurging trends and strategies for change. In D. Panda (ed) Tribal Problems of Today and Tomorrow, MBD, 1-10.

Panda, K.C. (1974). A proces model approach for research into retardates parental family: Theoretical and Methodological Considerations. Indian Journal of Mental Retardation, 71, 14-24.

Panda, K.C. (1976). Educational strategies for the Underprivileged children. IAAP conference in Psychology, Kharagpur.

Panda, K.C. and Lynch, W.W. (1972). Effect of social reinforcement on the performance mentally retarded children: a review on research with implications for classroom paractice. American Journal of Education and Training of the Mentally Retarded, 7, 115-123.

Pande, N. and Tripathi, R.C. (1982). Scheduled caste children: Some motivational consequences. In Sinha, Tripathi and Misra (1982) Deprivation. Ch. 12, 217-238, New Delhi: Concept.

Programme of Action, MHRD, 1992 Govt. of India, New Delhi.

Rath, R. (1974). From Scoial Isolation to Stagnation. A study of Scheduled Caste groups. Social Action, 24, 2.

Rath, R. (1975).

(i) Teaching and learning problems of the disadvantaged children.

(ii) Personality and behavioural problems of the disadvantaged.

(iii) Problems of integration of the disadvantaged to the mainstream, UGC Lectures, Cyclostyled, obtained from Professor Rath.

Ray, P. (1982). Effect of attribution training on the development of intellectual achievement responsibility and cognitive performance among lower class children. Ph.D. Thesis, Utkal University.

Sinha, D. (1976). Study of Psychological Dimensions of Poverty: A challenge and necessity. Journal of Social and Economical Issues, 4, 167-200,

Weikart, D.B. (1971). Early childhood special education for intellectually subnormal or culturally different children. Michigan Educational Research Foundation.

Witkin, H.A. : Moore, C.A. : Goodenough, D.R. and Cox, P.W. (1977). Field dependent and field independent cognitive styles and their educational implication. Review of educational research, 47, 1, 1-64.

Zigler, E. (1966). Mental Retardation : Some issues and applications. In I.W. Hoffmann and M.W. Hoffmann (eds.). Review of child development research: New York, Sage Publications, 2, 107-168.

14

TEACHING THE SOCIALLY DISADVANTAGED

Focus points

This chapter deals with teaching techiniques for the disadvantaged. Attempts have been made to analyse the problem in terms of teacher behaviour, teaching strategy, and curricular concerns. Several points of reference have already been discussed. The crux of this chapter is how a teacher ought to behave with the disadvantaged children ? What specific techniques he should follow ? What changes are visualised in the curriculum?

It is relevant to raise scuh a question?

Deutsch (1963, 1964a, 1964b) has emphatically voiced the feeling that compensatory education for socially deprived children is no substitute for changes in the structure of education itself. Merely giving such children an opportunity to begin slightly ahead of the class is of little use if the regular schooling is not, at the same time, made relevant to them. There is little to be gained from surrounding these youngsters with loving and understanding adults with their preschool test of learning if they are sugbsequently are exposed to teachers who approach them with pre-conceived notions of limited potential. Evidence shows that compensatory education has short term benefits unless there is censis tent follow up. Children's preschool gains have been shown to be spectacular as they entered the first grade but are quick to erode in the next four years unless they are constantly reinforced. If there is a gap between preschool education and kindergarten or first grade, the gains are minimal. Perhaps the school can be seen an island that compensates for or off-sets what is lacking outside, akey that unlocks individuals who have been closed to learning (Taba & Elkins, 1966). What are these conditions/ The conditions are :

1. The teacher and teacher behaviour.
2. Instructional strategy.
3. The curricular concerns.

The teacher and teacher behaviour

The teacher besides others should be caring, and humane one who is interested in those children personally and is concerned as to what happens to them. A student should feel "good about himself" a procces that enhances his self-concept. A word of praise, doing fine, well done, greeting the students when you see them, a note of written praise to parents about their child' performance in school, helping to solve their problems in school learning and sharing their triumphs or achievement and more effective in producing learning in these children.

Sometimes students face critical problems where they can not put their hands easily. In such cases, they should help the child to hold on and assist in solving it, particularly in the context of examinations. There is nothing wrong with their intelligence. The socially disadvantaged child is just afraid. He looks at the paper and gasps. The teacher can come to his rescue by taking him out of his class in free period and sit with him. He does well in examination. Besides this assistance, the teacher needs to build self-respect and trust. A teacher can create an atmosphere where the child can feel his self fulfilling, and develop his self-esteem and has a feeling of worth. If the teacher shows his worth then child imitates and increases his self worth. The teacher accepts the feeling as facts. The teacher can give the students a chance to make decision about things that concern them in one way for teachers to demonstrate respect.

Trust develops also from evidence of sharing feelings. In the beginning students don't dare to come out. The teachers have to give a start in opening themselves trust must be developed.

The teacher ought to help students to help each other. This self-help can extend to understanding and controlling interpersonal conflicts e.g., name calling. Teachers ought to raise the aspiration level of these students. Since the attention span is at the minimum, the teachers do not learn much by listening. By that truancy is reduced and children are happy. Students should read to each other what is known now as peer tutoring. Cartooning, listening to tapes improve their learning. These students are incapable of using the library, selecting the appropriate book to read. Teachers ought to supply the resource materials and give them these in a sequential manner. It is not easy to plan learning sequences. It requires a thorough fair knowledge of what students know and can do in order to break the learning down into bite size pieces appropriate to student's capacity to master them. Teachers should know how to plan for long-term and short-term activities.

Instructional Strategies

How to translate what they know about children into motivational devices, and how to make abstructions concrete. Teaching for the socially disadvantaged should be individualised, diversified and teaching materials must be quite common but differentiated.

Teaching should be activity based. It is a deliberate way of cultivating readiness and upgrading learning. Making booklets, drawing hands, and pasting advertisements may seem useless play. But these activities help hold attention, provide appropriate starting points and create a sense of accomplishment, they have a place in the programme. Pairing students to read with each other improves reading practice, prevents disruptive activities, Socio-metrically grouped pairs are most effective.

Use of technological aid is another device to help the socially disadvantaged. They can learn a their own pace without disturbing others e.g., use of tape recorders, earphones. For students with long frustration with books & correcting teachers, this experience is a perfect antidote. It cuts across out all precious blocks.

Although the technique is good for only certain occasions, it cannot be a regular diet. Apparently playing music on the tape recorder during art work, modeling, cutting and pasting, has calming effect on students.

Teaching in the dark is questionable practice in any case.

This is especially true in teaching students whose background motivation or, learning styles and habits deviate from the usual and whose attitude towards school and teachers have been disturbed by years of frustration stemming from unsuccessful learning careers. It is important that this diagnosis encompasses a wide array of types of learning knowledge, cognitive styles, level of cognitive development, emotional dynamics, self-concepts, skills, attitudes and interest among others. Instruction is a veichle through which the purpose of education are executed. If the vehicle is not appropriate, these purposes will not be served.

Continuous diagnosis is necessary to provide information needed to determine the existing level of achievement and to permit the teacher to judge readiness of students for the ensuring learning activities. Without this information, information can either overreach or underreach what students can do. Overreaching the socially disadvantaged does more damage and erosion, irreparable. Hence, instruction should be based on analysis of results.

The emotional and social barriers that affect learning must be understood in order to create crricular experiences. That are meaningful and worthwhile for the students for whom they are intended. This understanding is essential to regarding students as an individual and as human beings with positive qualities. It is necessary to remove blocks to learning, open-ended questions to students provide answer to these questions.

In addition to self-respect, a teacher needs to know much that can be perceived only from an adult perspective. Observation yields this kind of information. It is especially necessary with students whose skills in writing and self expression are immature, as is frequently true of culturally deprived children. It is difficult for even the most conscientions teacher to observe every child in a class over thirty, while at the same time teach all of them. Systematic observation is necessary to get information on an obstructive and withdrawn students.

Many culturally deprived children come from broken homes. Hence, their needs of alienation and withdrawal are sutdies including fearful situations which detract them from learning.

Diagnosis for the purpose of guiding instructions is incomplete without on information about the conditions that either enhance or impede learning. The social climate of the classroom particularly interpersonal relationship that affect the atmosphere of the classroom, determines the communication lines, discipline and amount of energy that an individual can put into learning. This also determines the roles they can play in a group and therefore, their access to the sources of learning and of stimulation. Sociometry offers the information.

Conventional instruction does not reach adolescents with cultural and educational deficits who have established a negative attitude towards their own capacities, school learning, teachers and the rest. The severe deficits that are seen among the socially disadvantaged is a char testimony of the lack of success of such programmes.

Remedial education is not enough. A qualitatively different programme is called for. Their learning processes are same as general learning principles but with a difference. Hence, certain general conditions have to be adhered to

(a) A continuous diagnosis of needs is required and it must be comprehensive.

(b) Diagnosis via feedback becomes part of every teaching and a basis for planning the next outcome.

(c) Knowledge, thinking, attitudes and skills are to be pursued simultaneously.

(d) Students must master certain cognitive process and intellectual skills as they are corner stones to reading and skills in mathematical problems.

(e) Things most move from abstract to concrete.

(f) Sensitivity training and the development of attitudes trend self and other people and to the gamut of democratic values and human relations are another important area of emphasis, necessary for self-development and school learning.

(g) Teachers must plan for (i) knowledge and information (ii) type of learning experiences (iii) scope and sequence of the learning experience.

(h) Instead of wider coverage content limitation should insisted including emphasis on understanding.

Contents should be important and priority wise.

(i) Concrete and contrasting examples are required for sharpening perception and enhancing cognitive functioning of students.

(j) Learning experience must be sequential and with a built in continuity using both short-term and long-term goals.

(k) Teachers must start from familiar examples and provide varied learning experiences, which many teachers wrongly conceive as a meaningless exercise.

(l) Provisions should be made for heterogenity in ability, skill and background knowledge.

(m) Learning prerequisites are required inorder for pace learning.

(n) Creating an appropriate motivational device, which is markedly different further from than of other students.

(o) In case of socially disadvantaged children "tangibility, concertness, overt activity are necessary ingredients of the learning experiences, if curiosity is to be kept alive and the habit of short attention span is to be kept alive and the habit of short attention span is to be overcome. The learning experiences also need to include overt activities which in themselves are either integrating or rewarding to students.

(p) Learning activity or experience must allow success experience immediately and long-term goals are to be broken into smaller units which can be punctuated with some tangible, rewarding product or outcome.

(q) Intrinsic motivation is to be capitalised. Even the more disadvantaged students have a potentiality for curiosity in learning perse. They do want to know something. They want to feel masters of some processes. They can be intrigened with performances such as intellectual process of discovering the causes and consequences of events, of putting facts together, making inferences from them. Hence, the task must be meaningful and interesting.

Curricular concerns

Curriculum can serve many purposes in the education of culturally deprived or socially disadvantaged. It is a means of sensitivity training a way of extending their limited experience with human behaviour and relations. Cultural isolation and alienation are the chief facts of life of the culturally disadvantaged. The avenues to the mainstream of culture are usually closed by segregation of residence areas, by a marginal existence, and by social isolation. Experience in such a setting and climate tend to cultivate ethnocenticity, limited self-concept and defeatist or aggressive hostile orientation toward the future. Socialising power of the families are greatly diminished. This aggravates the problem of transmission of values essential for self actualisation.

These restrictions and limitations impose on schools a special task of acculturation of filling in the gaps left by defects in family life and neighbourhood. Curriculum feels this gap if it is moulded in this direction.

Curriculum through language, literature, social studies should experience, internalise values, create identification with people, and problems unlike one's own. This has to be transacted in a non-threatening environment.

Curriculum should be relevant to their life problems which should give them a perspective on their own feelings, help them see the university of feelings and emotions.

Emotional contents if it can be divorced from the intellectual is of great import in the lives of all youth and especially of those whose cognitive development is retarded. Hence, materials must speak to feelings, inorder to provide impetus for learning.

Curricular concerns must take into account such directions including the heterogenity of ability present among such disadvantaged groups.

Experience gained can be organised, reorganised and the filling system can be stretched. Dramatisation, play making, and role playing are effective adjuncts to the traditional teaching methods in development of skills, solving conflicting views and feelings.

The other curricular concerns are already described in the chapter on policy, programmes and programmes, interventions, SC & ST. But what necessary is a specific teacher training with these ingredients.

Highlights

The humanism in teacher has been emphasized in the context of teaching the disadvantaged. The concept of humanism has been operationalised in terms of salient characteristics: affectionate, accepting, warm, fair, cool, greeting, helping attitude etc. Teaching strategy should emphasize: activity based, environment anchorings, technological aid, child centred, diagnostic, remedial, and reinforcing. Curricular changewould in most probability include culture specific examples, abolition of discriminatory content and symbols, preferrably a new teacher training package to deal with this selected groups.

REFERENCES

Deutsh, M. (1963). The disadvantaged child and the learning process. In Passow, A.H. (ed.). Education in depressed areas, New York: Teachers College, Columbia University Press.

Deutsch, M. (1964a). Facilitating development in the pre-school child: Social and Psychological perspectives. Merrill-Palmer Quarterly, 10, 249-263.

Deutsch, M. (1964b). Some aspects of the Psychosocial framework of teacher pupil relationships with respect to the disadvantaged, Boston University Human Relations Centre, July, 16-19.

Taba, H. and Elkins, D. (1966). Teaching Strategies for the Culturally Disadvantaged. Chicago, RandMcNally.

15

A PERSPECTIVE OF RESEARCH ON SOCIALLY DISADVANTAGED

Focus points

These days it is often catchy and one often becomes crazy to add "disadvantaged", "deprived", "SC", "ST", underprivileged, "weaker", section etc, to his or her research topic/title. Is it because this area is virgin? Is it because of social desirability? Does it enhance the scope of the research title? Ofcourse, it is always desirable that the title of research should be more explicit, and meaningful but not at the cost of being superficial, repetitive, and redundant. This chapter addresses what should be a perspective of research in the area of disadvantaged.

Research and development activities with the socially disadvantaged children has become a major concern with educational researchers and Psychologists and more so with educational planners directing projects on various disadvantaged target groups: Scheduled Caste, Scheduled Tribe, other backward classes, slum and street children, children in platform and orphans etc. The number of studies have shown a growth spurt but what is lacking in these studies is serious long-term committment and co-ordinated effort except for few studies (Misra and Tripathi, 1980; Sinha, D. 1982; Singh, A.K. (1978); and Panda, K.C. (1993). The concept of prolonged deprivation index is the only viable measure for assessment of socio-cultural disadvantaged both from a generic view point and diagnostic view point having practical implications for intervention studies, which of course presents a hard area of research endeavour.

Research on Social Disadvantage are many and varied but they lack a perspective. Psychologists, for too long, were preoccupied with studying the consequences of specific deprivations such as sensory deprivation (Ainsworth, 1962; Rutter, 1972) etc. They did not show much interest in the study of psychological consequences of poverty. The neglect of the study of poverty by the psychologists has been described as "The Poverty of Psychology" by Pearl (1970). In recent years, there has been growing interest among psychologists in the area of social disadvantage. One reason for this growing interest is the realisation of importance of socio-economic factors in the development and growth of the individual and the emergence of social psychology as an important branch of Psychology. It is increasingly being realised that human behaviour has to be studied in the total socio-economic millieu considering the interaction of various sociopsychological factors.

This then is the picture when we are thinking of research and development of socially disadvantaged in India. There are various constraints for such a backdrop but over the years systematic studies have appeared in the area of cognitive processes and personality dimensions but calibration of the dependent variables in terms of refined tools are a necessity.

The Department of Psychology at Allahabad, Utkal, Bhopal have by and large contributed to the growth of thinking in this area of concern. The UGC, ICSSR, NCERT have been instrumental in promotion of such research including design of action strategies to help the study of socially disadvantaged.

The National Policy document in education 1986 with its updated 1992 verson has made specific recommendations regarding modification of curriculum, pedagogic techniques, content and process of education based on the special needs of disadvantaged groups. Therefore, a perspective of research into the area of social disadvantage is a need of the day.

Area of research

Conceptual issues

In the developing countries, like India, the study of Psychological consequences of poverty and other factors of social disadvantage must receive a special priority. A large section of the population is living below the poverty line. Several economists have argued that poverty in India is either on increase or is constant at a high level (Dube, 1974, p.5).

In addition to being malnourished the socially disadvantaged children in India have extremely unsatisfactory school facilities. The drop-out rate in the disadvantaged group is very high. The scheduled caste and the scheduled tribe population in India is (16.48) per cent and (6.08) per cent respectively as per 1991 census. They have a low social status and they are targets of prejudice and discrimination for their caste and ethnic status. Thus, a very large proportion of the Indian population is socially disadvantaed. In India, therefore the study of psychological consequences of social disadvantage assume a special relevance and significance. The ICSSR standing committee on Psychology, had identified "Psychological problem of disadvantated groups and some important sectors of population like scheduled castes, scheduled tribes.........." as a high priority research area.

Problem of social disadvantage in india has to be examined from an Indian point of view. In a country like India, with regional variations, there is a need of a series of studies on psychological consequences of social disadvantage. There are infrastructural studies to assess awareness and utilisation, (Chitnis, 1981), first generation learners, wastage and stagnation, acceptance of urbanisation (Joshi, 1982). Impact of Governmental Measure (Khan, 1981), and social Mobility among social disadvantaged groups. But there is a need to focus on constraints in access to education, uneven growth of education and related topics.

Then what do the psychological studies on deprivation tell us and what course of action is suggested from these generalisation? Deprivation does exist among a large section of student community particularly SC whether we call it as due to inadequacy of early socialisation, organic deficits, mark of opression, inadequate social reinforcement, culture conflicts and educational deprivation. The various studies that emphasise population characteristics underlying deprivation at the same time agree on the complex interplay of various intervening processes (Panda, 1974) in causing the performance deficit of the SD children.

A large body of literature deal with trainability of intellectual function and reversibility of early deprivation which was in fact, the concern since a long time. There is little research to support that intellectual functions continue to be malleable into adult periods of life (Jensen, 1969) and compensatory programmes are myth. While this may be true largely, it is possible to accelerate the educational achievement of the SD issue from the educational achievement of the SD if we attack the issue from a more affective and interpersonal relationship angle. In fact, all learning occur in an emotional climate and this is more so far the deprived. Zigler attempts to account for the changes in the affective stage : Motivation, task involvement etc. Affective processes such as use of social reinforcement, giving attention and approval, building positive expectancies through initial success, elaborative comments and praise, non-verbal attention through a smile, do in fact improve cognitive performance (Zigler, 1966; Panda, 1971; Panda and Lynch, 1972; Panda, 1974).

An area of research in which data are available is the desegregation of SD children into a separate school system, special school and rural schools. Conssistently poor children attending school in poor neighbourhood tend to display poor achievement. Achievement levels rise with desegregation and it also brings about overall increase in quality of education throughout the system. Of course, in our society segregated classrooms are not available for the SD children to a large extent except for Ashram schools and Sevashram but there are schools in rural areas which represent the ecology of a special school. In regular schools, the teachers do hold stigmas and try to have their self-fulfilling prophecies achieved (Rosenthal and Jacobson, 1969; Panda and Guskin, 1976; Panda and Dash, 1980).

The belief that "he comes from a SC/ST/SD or his parents are labourers and that he cannot learn", this attitude of teachers is detrimental to the educational growth of SC (Pattnayak, 1994). Hence, each teacher must deal with all student population in equal manner and try to foster their curiosity, creativity and make them all active participatiors in the teaching learning process.

The other dimension of research on social disadvantage may not only deal with comparison with the normal or less deprived but social disadvantage as such, their psycho-educational characteristics in terms of school relevance, their strengths rather than only weakness, in a systematic manner for programme building particularly using PDS so that the findings are meaningful, comparable across groups, as well as across several areas of capabilities, not only accessible and easier areas i.e., intelligence, personality etc. but should highlight their adaptive behaviours, adjustments, information processing modes.

At present, normative studies on social disadvantaged in India are also absent. This is a necessity. The profile of a particular group or groups or groups would reveal sensal anchoring points for intervention, preschool, school or even comparesatory.

Training research

In order to help the social disadvantaged children not only an understanding of their strength or weakness are required but man power development to deal with the target group constitute another important dimension. This promarily refers to parents at home and teachers in schools, community at large. Not much materials, awareness programmes have been developed to make parents aware of dealing effectively with their disadvantaged child, no skill training programme has been specifically focussed to develope competencies among teachers, preschool and school level to hand the development of socially disadvantaged children to help remove their language deficiency, cognitive lapses, personality delays and several other abilities related to school achievement and social competence. Training research therefore is a felt need in the area.

Research on teacher education for the socially disadvantaged is the most neglected field with regard to any specific target group. So far in the whole of the country, the traditional teacher training programme is going on whether it is at JBT/CT (Primary Education) level or at B.Ed. level for secondary education. Since the emergence of NCTE and NCERT at apex level several reforms in teacher education have been undertaken and implemented. But by and large these are related to general teacher preparation for the normal school system. A very little component one would find about motivating teaching of the neglected community. Research on teacher training programme and their efficacy in the context of socially disadvantaged children are imperative.

An attempt has been made as regard training and preparation of teachers for the disabled by the National Institute of Mentally Handicapped, Visually Handicapped, Speech and Hearing. Ali Yavar Jung Institute of Hearing Impaired, National Association of Blind, and selected Universities in the country but not mcuh outcome has been generated (Panda, 1997).

Through skill training for inservice teachers of SC/ST/SD, pre-service training for elementary teachers and specialised training in District Institutes of Education and Training Teachers competence can be enhanced and teacher should deal

(a) SD children effectively and affectively.
(b) Motivate SD children and enhance aspiration.
(c) Teachers using appropriate teaching method to remove their deficiencies.
(d) Use remedial teaching for children.
(e) Change curriculum materials and draw it from their ecology without changing national framework.
(f) Make formative assessment and guide them at right time.
(g) Make School climate conducive for learning and make children at home.
(h) Allow peer group acceptance through deliberate manipulation and social reinforcement.

These are tips for teachers but they provide ample opportunities for action and applied research into the area of social disadvantaged.

Teacher's behaviour that is warm, permissive and encourging can attract underpriviledged to the school. The whole educational process has to be humanised and building up of interpersonal relationship can effectively contribute to academic exchange and improvement. Teachers can make a different in the life of the pupils and more so in the life of the underprivileged. We have to engineer what this difference ought to be in our policy, planning and implementation of an educational programme. For the most part, education of the SD children can be speeded up by dissemination of appropriate method of child rearing systems and values among the parents much before the child comes to school. This will definitely reduce the discontinuties between the norms of children and norms of school. In contrast to the varied, detailed and sometimes adequately designed studies and their reports, it is strange that these generalisations don't reach the common man who contribute to a great majority of the underprivileged children in school. Wider dissemination of such ideas are necessary among the public. Hence, training research should not only deal with skill development among the appropriate types of man-power to deal with disadvantaged groups but taking the findings to parents and community and study their impact. This is a virgin area of research to deal with.

Curriculum and instruction

Curriculum and Instruction are a major area of research in the field of social disadvantage. But it has rarely drawn the attention of psychologists and educators. There is a dire need to make curriculum relevant, need based and ability specific particularly from early childhood staged so that the disadvantaged groups are not alienated and lag behind. Research on content analysis of curriculum is required and also on curriculum transaction: Mode and Medium. The disadvantaged child has limitations and as such reading readiness research, language and skill development research, curriculum analysis research would definitely contribute to improving the abilities of the disadvantaged. But the problem is where is such organisation and organised thinking in our country? In there a single research institute in the whole of our country which has published, researched, experientally tried out programmes and programme modules to help the socially disadvantaged ? Research to answer this question will end in a myth rather truth. i.e., blanket No !! But every now and then we propagate that socially disadvantaged should be helped, their wastage and stagnation can be reduced. Is mid-day meal, free text books, free uniform the answer ? These are tangential. These are necessary but not sufficient. One has to look at the teaching strategies, teacher behaviour, integration and mainstreaming, development of enriched as well as compensatory materials, remedial instruction. Instructional research is required in relation to small group teaching, teaching through multi media, package, distance modes, computerised instruction, individualised instruction and presentation of materials through different sensory modalities, Teaching efficacy through mother tongue at the formative years of schooling may be effective but this prescription has been based more on logistics rather than empirical basis or findings. Validation of such recommendations through research are imperative but seldom done. Efficacy studies on instructional techniques constitute another area of research.

Teachers working in Ashram Schools, Sevashrams and Harijan and Tribal Welfare Schools need be highly skilled with thoughts and problems of education of SD children. This will not only reduce wastage, stagnation but will improve the system of education of SD children and bring then into mainstream of life. There is therefore, a need for overhauling the teacher eduction preservice curriculum and content enrichment training to teachers of SD children particularly the lower stage of education. Teacher training, recruitment and their effectiveness in these schools need be investigated on a long term basis so that indegenous techniques can be developed.

Some of the possible efficacy studies on instructional technique and management of educational environment may include : Creating a conducive environment and its effect on motivation and retention of the children; Child-centred approach to learning and its effect on achievement; Implementing child-to-child based approach by actively involving senior students in providing care for the juniors for ensuring regular attendance and educational guidance.

Management of environment

It has been suggested that besides ecology, SES, educational deprivation, society and community attitudes accelerate disadvantage. The home and community are influential factors. The attitude of community members, expectancies about the disadvantaged are to be manipulated by mass media and communication research. Same is true of classroom climate, peer attitudes for better adjustment. Hence, through research peer attitudes to be engineered, assessed, manipulated, dissemination of right kind of information, and provide an amicable environment. Preschool environment are to be managed by modelling, responsivenessto needs and area of soical disadvantaged should not remain as an area of academic research but has enough scope for applied research. Researchers should think in these lines rather than ivory tower research validating more often known facts.

Intervention research

Intervention research on a programmatic basis can form a part of research undertaking. Development of cognitive, social personal affective abilities as well as improving school learning and reducing wastage and stagnation introducing minimal levels of learning, reducing insecurity, anxiety, developing self-esteem may constitute important areas of research. Because not only disadvantage is multicausal but the consequences are multidimensional. Hence, intervention research should elicit the partnership attitude among psychologists, teachers, educationists, and collaboration among various agencies and institutes, involving professionals, which is not so in our society. Both cross sectional and longitudinal studies are required but hardly there are any longitudinal studies in India on social disadvantaged. Research in this area would provide a sound base for many programme planning.

Evaluative research

In our country through governmental and international agency efforts several programmes for improving the fate of children of the rural, disadvantaged, tribal and scheduled caste children are being floated. Whatever, evaluation research have been done these are primarily statistical and demographic. Seldom research efforts are directed towards assessment of children and programme effectiveness in terms of psycho-educational development of children, particularly socially disadvantaged. Mere evaluation of infrastructure and physical facilities for the disadvantaged as revealed through various survey reports are not enough nor it is the objective. Hence, case study, qualitative research studies may be conducted on the socially disadvantaged groups as a consequence of planned intervention and programme. There is a felt need for process oriented research.

Considering all these aspects, issues, and needs, it is felt that in order to implement policy guidelines, objectives, UEE in which socially disadvantaged children constitute an important segment, there is a research and development centre with primary focus on the socially disadvantaged groups either at each state level or national level under the Human Resource Development Programme. This institute can conduct micro and macro level studies which has direct impact on improving the educability of the socially disadvantaged.

Educational research with disadvantaged groups

Sachidanand (1991) made a systematic analytic study and review of research on disadvantaged groups between 1983-88. and identified gaps. Ambast (1966) dealt with educational problems of 3 tribal groups in Bihar - The Oraon-Kharia, Munda. While education and modernisation was studied by Srivastava (1968) among the Mimdas of Bihar. Toppo (1974) compared the impact of traditional, Governmental and missionary system of education on tribals. Rathnayya (1974) made an analysis of structural constraints in tribal education in Andhra Pradesh. Schooling deficiencies focussed the core of analysis of tribal education in AP by Yathiraj Kumar (1981) whereas the relative efficacy of NFE was examined by Sujatha (1980). Evaluative study was undertaken by Kamila (1985) in Orissa. Verma (1985) made an analysis of achievemen correlates of high school and junion high school students in UP. Pandey (1981) suggested different educational systems for improvement of tribals. Srivastava (1986) stated mother tongue as a medium of teaching to reduce stagnation and drop out among tribals. Singh, V.N. (1982) emphasized the parental discipline as a factor in regulating the tribal child's development. Educational needs were identified by Rout (1985) and Sinha (1984). Socio-cultural deprivation on the cognitive and noncognitive abilities were studied (Balakrishna, 1986; Chand, 1985; Joshi, 1985).

But none of the studies focussed on detribalisation, presentation of tribal culture in school and prevention of alienation, educational programme effectiveness, social change among tribal children due to education, efficacy of ashram and residential schools, role of tribal and non-tribal teachers in tribal schools, teaching-learning methods particularly suitable to first generation learners. Such studies in tribal groups which constitute a section of disadvantaged population should be studied alongwith planned programme of intervention.

Scheduled caste constitute another disadvantaged group. The research focus has been highlighted in the text in different context but in terms of a programmatic research a perspective is what we need at the moment. Review of studies made by Sachidanand (1991) high lighted major gaps in research with scheduled caste groups. How far untouchability has proved to be fatal for education of scheduled caste children. Discrimination and inter ethnic attitude studies are also necessary to shape and design classroom climate for the welfare of the SC children. Has education raised social awareness of the SC community? Has training centres produced necessary competence among candidates appearing in different examinations where are such attempts?

Minorities and other Backward classes constitute another target group of disadvantage. While OBC as a category has recently been identified yet the cluster did exist in Indian society as low SES group. The study of behavioural, personality, cognitive concommittants of socio-economic deprivation need to be investigated. Study of minority groups and slums do require special attention and there is dire need to identify and modify their deficiencies. The problems faced by these groups in their education has to be brought to surface and thereby redesigning of education scheme can be conceived. The same thing is true of disabled whose disadvantagevary in kind and degree. A special coverage for their research has been given by Panda, 1997, hence further duplication is redundaint.

The fact tactily emerges therefore that future research in India, must look at different dynamics and dimensions if the socially disadvantaged are to be helped in our society.

Highlights

Research in the field of Disadvantaged should concentrate upon conceptual issues: first generation learners, wastage and stagnation, acceptance of urganisation, social mobility, effects of schooling, social stigma, various proceses; cognitive and affective, in the furtherance of education of disadvantaged since an accepted framework of describing the Disadvantaged is available in terms of PDS. Manpower development of research in the area is also another need particularly teachers, social workers, and rehabilitation personnel. Curriculum and Instruction is another area of research. Evaluation research, research with different disadvantaged groups should be undertaken with a positive outlook and in a systematic manner for the growth of the field and the Disadvantaged children.

REFERENCES

Ainsworth, M.D. (1962). The effect of maternal deprivation : a review of findings and controversy in the context of research of its effects. WHO Geneva.

Ambast, N.K. (1966). A critical study of tribal education. Ph.D. Thesis. Anthropology, Ranchi University.

Balakrishna, (1986). Effect of socio-cultural deprivation on some cognitive and non-cognitive abilities of tribal adolescents, Ph.D. Psy. Magadh University.

Chand, J. (1985). A comparative study of various Naga tribal pupils in relation to their self perception, socio-economic status vocational and educational aspirations and academic achievement. Ph.D. Education, NEHU.

Chitnis, S. (1981). A longway to go—Report on the survey of Scheduled Caste high school and college students in fifteen states of India. Allied Publishers, Bombay.

Dube, S.C. (1974). Contemporary India and Modernisation. Vikas Publishing House Pvt. Ltd., Delhi.

Jensen, A.R. (1969). How much can we boost IQ and scholastic achievement. Harvard Education Review, 39, 1-123.

Joshi, S.D. (1982). Problems of education of the weaker section of the society with respect to the weaker sections in Baroda district. Centre of Advanced Study in Education, MSU.

Joshi, H.O. (1985). A study of the working of tution classes and their social utility Ph.D. Education. Saurastra University.

Khan, N.A. (1981). Group applications and pressure politics in academic institutions. Ph.D. Sociology, AMU.

Mishra, G., Tripathi, L.B. (1980). Psychological Consequences of Prolonged Deprivation. Agra Psychological Corporation, Agra.

Panda, K.C. (1971). Effect of social reinforcement : Theoretical issues and research implications. Psychological Studies, 15, 55-67.

Panda, K.C. (1974). A process model approach for research into retardate's parental family. Theoretical and methodological considerations. Indian Journal of Mental Retardation, 7(1), 4-24.

Panda, K.C. (1993). Elements of Child Development, Ch. Underprivileged children. Kalyani Publishers,. New Delhi.

Panda, K.C. and Dash, P.C. (1980). Effect of stimulated information on assessment of Cognitive competence. Indian Educational Review., 14, 22-35.

Panda, K.C., Lynch, W.W. (1972). Effect of Social Reinforcement on the Performance of Mentally Retarded Children. Review of research with implications for classroom practice. American Journal of Education and Training of Mentally Retarded, 7, 115-123.

Panda, K.C. (1997). Education of Exceptional Children. Vikas Publishing House, New Delhi.

Panda, K.C. and Guskin, S.L. (1976). Effect of Tutor's locus of control and expectancy information on tutor behaviour and pupil performance. Indian Journal of Behaviour, 1, 36-44.

Pandey, P.S. (1981).. A study of Socio-economic Opportunity and Educational Achievement. Ph.D. Sociology, Kashi Vidyapith.

Pattnayak, L. (1994). Effect of simulated expectancy in assessment of cognitive competence of pupils as a function of status characteristics of teachers and pupils. Ph.D. Thesis. Utkal.

Pearl, A. (1970). The Poverty of Psychology—an indicatment. In Vernon, L. Allen (Ed.). Psychological factors in Poverty. New York: Academic Press.

Rathnayya, E.V. (1974). Structural constraints in Tribal education a regional study. Ph.D. Sociology. Andhra University.

Rosenthal, R. and Jacobson, L. (1968). Pygmalion in the Classroom. Holt, Reinehart and Winston, N.Y.

Rout, P.C. (1985). A multidimensional approach for analysis of trends, perspective, and educational programme in tribal education and formulation of action strategies, Ph.D. Education. Utkal University.

Rutter, M.L. (1972). Maternal Deprivation Reassessed. Penguin Books.

Sachidanand, (1991). Research in the education of the Disadvantaged. Buch, M. (Ed.) Fourth survey of Research in Education, NCERT, Ch. 30.

Santra, B. (1984). Education of Santhals—Identification of Educational Needs, Probabilities, and Problems. Viswa Bharati, Ph.D. Education.

Sihna, D. (1982). Towards an ecological framework of deprivation. In Sinha, D.; Tripathi, R.C. and Misra, G. (Ed. Deprivation: its psychological roots and consequences. Concept, New Delhi.

Singh, A.K. (1978). Social Disadvantage, Intelligence and Scholastic Achievement. Report of the NCERT Project, Ranchi University, Ranchi.

Singh, V.N. (1982). A comparative study of child rearing practices in Santhals and Non-Santhals Ph.D. Psy. Bhagalpur University.

Srivastava, L.R.N. (1968). Education and Modernisation among the Munda and Oraon of Ranchi. Ph.D. Sociology. Patna University.

Srivastava, P. (1986). A socio-psychological study of stagnates among tribal and non-tribal students of class VIII, Ph.D. Education, Lucknow University.

Sujata, D. (1980). An investigation in to the constraints on education of the Nellore District Yaradis with a view to suggest some strategies of NFE. Ph.D. Education, Andhra University.

Toppo, S. (1974). Education then and now among the Oraon. Ph.D. Education. Ranchi University.

Verma, M. (1985). Factors affecting academic achievement . A cross cultural study of tribals and non-tribal students at junior High School level in Uttar Pradesh. Ph.D. Education. Avadh University.

Yathiraj Kumar, A. (1981). School System and Tribal Community-A study on scheduled tribes of Bhagirathi Block. Ph.D. Anthropology, Andhra University.

Zigler, E. (1966). Research in Personality Structure in the Retardate. In N.R. Ellis (eds.) International Review of Research in Mental Retardation, 1, New York: Academic Press, 77-108.

INDEX

Abraham, D., 72
Acharya Ramamurthy Committee, 202
Adult education, 199
Agarwal, V.R., 116, 141
Agatti, A.P., 106
Ahmed, S., 117-20
Ainsworth, M.D., 244
Allport, 106
Ambast, N.K., 252
Ambedkar, 127-28
Anamalai, E., 47
Anantharaman, R.N., 105
Atkinson, J.W., 86, 88
Balakrishna, 252
Baldwin, 101
Bansal, J.P., 142
Behura, N.K., 171
Belmont, L., 140
Bennur, C.S., 72
Bereiter, C., 46
Bernstein, B., 60
Bernstein, C., 45-47
Berry, J.W., 115
Betancourt, H., 90
Bhadra, B.R., 106
Bhargav, M., 90
Billings, D., 8
Birch, H.G., 140
Bloom, B., 203
Bradley, R.H., 183
Bronfenbrenner, U., 10, 104, 206
Broomstick effect, 31
Brown, B., 60
Brown, P., 6
Bruner, J.S., 2
Caldwell, B.M., 183
Caldwell, B.N., 98
Centrally Sponsored Schemes, 197
Chand, J., 252
Chaplin, M.D., 89
Chatterjee, B.B., 14, 16, 66
Chitnis, S., 245
Clark, R.B., 2
Clarke, A.D., 121
Clarke, A.M., 121
Cognitive process, social disadvantage and, 23-42
Cognitive style, of socially disadvantaged, 111-16
Cohen, S.A., 204
Cole, M., 2
Coleman, J.C. 4, 6
Coleman, J.S., 56, 71, 204-05, 214
Covington, M.V., 26
Coward, B.E., 8
Crain, R.L., 205
Cravioto, J., 26
Creative thinking, among socially disadvantaged, 116-23
DIET, 213
Dani, J.B., 169
Das, A.S., 121, 167
Das, G.N., 172
Das, J.P., 27-30, 34, 41, 61-62, 64, 66, 68, 73, 138-39
Das, L., 169
Das, P., 68, 74, 169
Das, S., 167, 169
Das,S.K., 170
Das, U.C., 93
Das Gupta, N.K., 170
Das Patnaik, P.S., 167, 169
Dash A.S., 143

Dash, P., 218, 226
Dash, P.C., 246
Dash, U., 143
Dave, P.C., 172
Davidson, C., 8
Davis, A., 103, 203
Davis, K., 6
Davis, R.E., 14
Dececco, J.P., 71, 204
Delabry, J., 72
Deprivation,
    effect, 75
    index, 14
    role in conceptualisation, 37
Desai, H.G., 143
Deutsch, D., 4, 7
Deutsch, M., 13-17, 24, 36, 59-60, 73, 103, 116, 140, 167, 203, 235
Devi, Rajpate, 145
Dhapolla, T.S., 100, 104
Dohrenwand, B.P., 98
Dohrenwand, B.S., 98
Dube, S., 142
Dube, S.C., 245
Dugan, R., 73
Dunham, H.W., 98
Durkin, K., 92
Dutta, T., 38-39, 140
Dyk, R.B., 112
Early Childhood Care and Education (ECCE) Programme, 209-12
Economic Rehabilitation of Rural Poor, 173
Education Commission 1882, 129
Education Commission (1964-66), 193, 202
Ekka, E.M., 171
Elando, R., 183
Elementary education, 197-98
Emanuel, S., 144
Engleman, S., 46
Eysenck, 57
Fabun, D., 117
Faramesh, 119
Faris, R.E.L., 98
Faterson, H.F., 112
Firstein, 227
Forehand, R., 98
Forman, S.G., 118
Frank, J.D. 89, 91
Gandhi, Mahatma, 128
Gardner, H.W., 112
Gatieg, C.M. 8
Getsinger, S.H., 102
Ghosh, E.S.K., 65
Ginsberg, H., 37
Girija, P.R., 106
Gokulanathan, P.P., 30, 72, 86-87
Goldstein, L.S., 60
Goodenough, D.R., 112, 114
Gottlieb, 204
Government of India Act of 1919, 129
Government of India Act of 1935, 130
Grandall, V.C., 185
Greenberg, J.W., 86
Greenfeld, 115
Guskin, S.L., 246
Haley, G.L., 119
Harris, D.B., 185
Harris, W.J., 116
Hartog, Philip, 129
Havighurst, R.J., 103
Haywood, H.C., 125
Heckhausen, H., 84, 90
Heller, A.O., 98
Hess, R., 93, 203
Hess, R.D., 98, 100
Higgin, 58
Hoffman, M.L., 100
Hogan, J.D., 117
Holtzman, P.S., 112
Honegar, L.E., 120
Hudson, W., 26
Hundal, B.S., 72
Hunt, J. Me, V., 24, 215
ICSSR, 244-45
Integrated Child Development Service (ICDS), 173, 209-13
Integrated Rural Development Project, 173
Integrated Tribal Development Project, 173
Intellectual abilities, 55-71, 77-79
    genetic or environmental difference, 57-71
Intervention programmes and strategies, 203-33
    pre-school intervention, 203-15
        convergence of service, 212-13
        early childhood care and education, 209-12
        effectiveness of, 205-08
        remedial measures, 208-09
        school integration vs, segregation, 213-15

school intervention, 215-32
  achievement responsibility, 215-17
  analytic ability development, 218-23
  anxiety, classroom learning and adjustment, 223-26
  creative thinking ability development, 226-28
  strengths of disadvantaged and, 228-30
  teachers role, 217-18
  teaching and guidance, 230-32
Isaken, S.G., 122, 227
Jachuck, J., 61-62
Jachuck, K., 28-29, 63
Jacobson, L., 71, 214, 246
Janardan Reddy Committee, 202
Jarman, R.F., 68
Jensen, A.R., 27, 32, 56-57, 59, 64, 73, 246
Joehuck, 139
John, V.P., 60
Joshi, H.Q., 252
Joshi, R.K., 117-20
Joshi, S.D., 245
Kagan, J., 60, 71, 112, 207-08
Kamila, 252
Kanungo, R.N., 64
Kanzer, P., 72
Kardiner, A., 103
Karnes, M.B., 204
Karp, S.A., 112, 114
Katz, I., 2, 73
Kaul, V., 114, 117, 228
Khan, N.A., 245
Kirby, J.R., 68
Klein, G.S., 112
Kohn, M.L., 99
Kohn, Melvin, 105
Krishna, K.P., 121
Kulka, A., 84
Kumin, L.B., 116
Kundu, M., 171
Kuppuswamy, B., 102
Labor, W., 47
Lakshmy, Anand, 17
Lalitha, 121
Langmeir, T., 97-98
Language ability of socially disadvantaged, 45-53
  as integral, part at pre-school and school level, 52
  characteristics, 45-47
  classroom size, 51
  clinical diagnosis and reading specialists, 51
  compensatory education for language training, 47-48
  comprehensive services, 49
  information system approach, 51-52
  language teaching, 52-53
  matrix game, 49
  performance aids in teaching reading, 50
  programmed strategy and creative process, 50-51
  reading materials, 51
  reading readiners, 49
  skill development, 48-49
  structural sequance of reading skills, 50
  ungraded primary and individualized instructions, 50
Language teaching, to socially disadvantaged, 52-53
Lenka, N., 144, 150-51
Lenneberg, E.H., 45
Lesser, G.S., 32
Lewis, O., 11
Linguistic deprivation, concept of, 5
Loehlin, J.C., 59
Luria, A.R., 27, 41
Lynch, W.W., 205, 231, 246
Mac Eachron, 115
Mahanta, J., 169, 170
Mahapatra, M.M., 128
Mandelbaum, 128
Manos, J., 64
Maslow, A.H., 86
Massey, R.R.K., 65
Matejeck, Z., 97
Mathur, S.S., 72
McClelland, D.C., 85-86
Mehdi, Baqer, 118
Mehta, A., 148
Mehta, P.,30, 86, 88
Miller, D.R., 88, 98
Minimum Levels of Learning (MLL), 198
Mishra, A.M., 143
Mishra, D., 171
Mishra, M., 172
Misra, G., 7, 10, 18, 30, 32, 34-37, 41, 65, 76, 87-88, 92, 100, 139, 243

Mohanty, A.K., 63
Mohanty, C., 169,171, 233
Mohanty, G.S., 98
Mohapatra, L.K., 171, 175
Mohapatra, P.C., 171
Molly, G.N., 67
Molloy, G.N., 63
Moreno, J.M., 117
Moss, H.A., 112
Motivational characteristics, of socially disadvantaged, 83-89
Munsey, W.L., 14
Murlidharan, R., 98, 120
Mussen, P.H., 103
Muthayya, B.C., 87, 91
NIEPA, 202
National Council of Educational Research and Training (NCERT), 147, 202, 230, 244, 247
National Policy on Education (NPE) 1986, 127, 161, 194-96, 204, 209
  minorities education, 196
  scheduled castes education, 194-95
  scheduled tribes education, 195
National Rural Employment Programme, 173
Nayak, B.P., 169
Non-Formal Education (NFE), 197, 211-12
Nutritional deprivation and achievement, 37-42
Ovesey, L., 103
Padhy, N., 169
Panda, A., 170,
Panda, B., 169
Panda, D., 171
Panda, K.C., 4, 18, 28, 30, 38, 44, 61, 73, 75, 92-93, 97, 138-40, 147, 167, 169-71, 174, 205, 208, 231, 243, 245-46, 248
Panda, M.D., 143, 184
Panda, R., 169, 171
Panda, S., 169
Panda, S.C., 171, 174
Panda, T.P., 28-29, 61-62
Panda, U.N., 171
Pande, N., 142-43, 214
Pandey, P.S., 252
Pandey, R.C., 121
Pandey, R.N., 121
Pappachan, P.O., 68
Parack, 119
Paramaj, S., 121
Parental life style, impact on socially disadvantaged, 183-91
Pareek, U., 93
Patnaik, N., 118, 167
Pattnayak, L., 246
Pearl A., 244
Perlukar, R.V., 129
Personality characteristics of, socially disadvantaged, 97-100
Phooly, Jotirao, 129
Piaget, J., 24, 59
Piers, E.V., 185
Programme of Action 1992, and education of
  SCs and STs, 196-202
    additional measures, 200-01
    adult education, 199
    elementary education, 197-98
    evaluation of schemes, 201-02
    incentives, 199
    monitoring of schemes, 201
    reservations, 199-200
    teachers and their training, 200
Prolonged deprivation, scale, 18-20
Rabindranath, M.N., 171
Rai, R.N., 121
Raina, M.K., 117
Rao, S.N., 31
Rath, R., 15, 99-100, 118, 139, 143, 167, 205, 215
Rath, R.C., 215
Rath, S., 121
Rathnayya, E.V., 252
Ray, P., 216
Raychoudhury, K., 105
Renzulli, J.S., 117-18
Research on socially disadvantaged, 243-53
  area of, 244-47
  conceptual issues, 244-47
  curriculum and instruction 249-50
  educational research, 251-53
  evaluative research, 251
  intervention research, 250-51
  management of environment, 250
  training research, 247-49
Riessman, F., 2, 4, 48
Rohwer, W.D., 116

Rosenthal, R., 71, 214, 246
Rout, P., 167
Rout, P.C., 252
Rutter, M.L., 244
SCERT, 213
Sachdeva, P.S., 142
Sachidanand, 251-52
Safaya, R.N., 146
Samant, C.R., 15
Santra, S., 170
Sapra, C.L., 147
Scheduled Caste Children, 128-57, 194-202
  academic performance, 149-50
  demographic characteristics, 131-33
  educational strategy for, 151-53
  enrolment and retention trends, 133-35
  higher education, 135-37
  issues and concerns, 145-49
  legacy, 128-31
  literacy among, 131-33
  NPE-1986 and, 194-95
  POA-1992 and, 196-202
  parents education, 150-51
  professional education, 135-37
  psychoeducational characteristics, 137-45
  research directions, for, 154-55
  sociological issues, 150
  special assistance to, 153-54
  specialised training for teachers to teach, 155-56
  state of art of, 128
Scheduled tribes childrens, 161-67
  characteristics of, 167-70
  constraints in education among, 171-72
  demographic characteristics, 162-64
  educational concerns, 173-75
  enrolment and retention trends, 164
  higher education, 167
  innovations in tribal education, 172-73
  literacy among, 162-64
  NPE-1986 and, 195
  POA-1992 and, 196-202
  professional education, 167
  research direction in education for, 175-77
  research trends in, 170-71
  secondary schools, 166-67
  state of art of, 161
  upper primary education, 166
Seetharam, R., 119
Segall, M.H., 26
Self-concept, among socially disadvantaged, 101-04
Sengupta, K., 105
Sewell, W.H., 98
Shah, M.A., 90-91, 143
Shahi, B.P., 65
Shanmugan, T.E., 99-100
Sharma, A., 98
Sharma, M., 92
Sharma, R.C., 147
Sharma, S., 72, 100, 105, 117
Shaw, B.N., 171-72
Shipman, V., 93
Shuey, A.M., 56
Shukla, D., 26
Shukla, P., 24, 97
Sigel, I.E., 112
Simpson, R.L., 91
Singh, A.K., 56, 65, 72, 87, 243
Singh, H.M., 90
Singh, J.G., 106
Singh, S.D., 103
Singh, V.N., 252
Singha, P.S., 27, 34
Sinha, D., 9, 24, 26, 32, 34, 63, 93, 97, 205, 243, 252
Sinha, Jai B.P., 92
Sivers, 58
Skeels, 57
Skodak, 57
Soares, A.T., 102
Soares, L.M., 102
Socially disadvantaged,
  aspiration studies on, 89-93
  characteristics identified for, 7-9
  cognitive process and, 23-42
  cognitive style, 111-16
  concept, 1-2
  culture and perception of, 26-34
  creative thinking ability, 116-23
  difference approach to, 4-7
  ecological framework of, 9-10
  educational policies and programme for, 193-202
  effect of prolonged development on perception of, 34-37

  intellectual abilities, 55-71, 77-79
  interpretion of, 2-3
  intervention programme and strategies, 203-33
  language characteristics of, 45-52
  language teaching, 52-53
  measures of 13-20
  motivation and, 83-94
  nutritional deprivation and achievement, 37-42
  parental life style and, 183-91
  perceptual functioning, 25-26
  personality characteristics among, 97-106
  perspective of research on 243-53
  school learning, 71-79
  self concept among, 101-04
  strength of, 228-30
  teaching of, 230-32, 235-42
  values among,104-06
Socio-economic status, and cognitive functioning 60-71
Soysa, P., 41, 66
Spark, H.L., 38
Speidel, G.E., 119
Spence, 112
Spielberger, 224
Spitz, R.A., 99
Srinivas, M.N., 127
Srivastava, A., 141
Srivastava, L.R.N., 174, 252
Srivastava, R.I., 143
Srole, L., 98
Strodbeck, F.L., 93, 183
Sujatha, D., 252
Swanson, G.E., 98
Swedish Nutrition Foundation, 38
Taba, H., 236
Tannenbaum, A.J., 24
Tapp, J.T., 25
Teaching of socially disadvantaged, 230-32, 235-43
  curricular concerns, 241-42
  instructional strategies, 237-41
  teacher and teacher behaviour, 236-37
Terrel, G., 72, 92
Thaper, G., 106
Tilak, J.B., 148
Tiwari, A.N., 91
Tiwari, G.P., 90, 146
Tiwari, N., 143
Toppo, S., 252
Torrance, E.P., 116, 122
Torrance, J.P., 122
Treffinger, D.J., 122, 227
Tribal education,
  concern for, 173-75
  constraints in, 171-72
  innovations in, 172-73
  research directions for, 175-77
Tripathi, K.C., 128, 143
Tripathi, K.M., 139
Tripathi, L.B., 7, 10, 18, 30, 32, 35-36, 41, 65, 76, 87-88, 92, 100, 243
Tripathi, R., 4
Tripathi, R.C., 214
Trivedi, 119
UGC, 244
Uchat, D.A., 143
Upadhyaya, U., 104
Values, among socially disadvantaged, 104-06
Vedanayagam, E.G., 119
Verma, M., 252
Vernon, P.E., 58-59, 67
Vyas, A., 171, 175,
Waterlow, J.C., 41
Weikart, D.B., 206
Weiner, B., 84, 90
White, B.L., 3
Whiteman, M., 4, 7, 13-17, 24, 36, 73, 140, 167
Whitkin, H.A., 37, 112-13, 115, 229
Wiesley, M., 92
Winterbottom, M.R., 85
Wiseman, C.S., 205
Wylie, R.C., 101
Yathiraj Kumar, A., 252
Yee, 204
Zegiob, L.E., 98
Zigler, E., 72, 231, 246

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